103

DREDGING AND ITS IMPACT

Y 4.M 53:103-101

Dredging and Its Impact, Serial No....

ING

THE

SUBCOMMITTEE ON MERCHANT MARINE

OF THE

COMMITTEE ON
MERCHANT MARINE AND FISHERIES
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

ON

DREDGING AND THE VITAL ROLE U.S. PORTS PLAY IN THE NATIONAL ECONOMY, AND USING WISE ENVIRONMENTAL PRACTICES IN DREDGING

JUNE 16, 1994

Serial No. 103–101

Printed for the use of the Committee on Merchant Marine and Fisheries

DEPOSITORY
OCT 5 1994

U.S. GOVERNMENT PRINTING OFFICE
81–949CC WASHINGTON : 1994

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-044827-1

103

DREDGING AND ITS IMPACT

Y 4. M 53: 103-101

Dredging and Its Impact, Serial No....

ING

BEFORE THE

SUBCOMMITTEE ON MERCHANT MARINE

OF THE

COMMITTEE ON
MERCHANT MARINE AND FISHERIES
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

ON

DREDGING AND THE VITAL ROLE U.S. PORTS PLAY IN THE NATIONAL ECONOMY, AND USING WISE ENVIRONMENTAL PRACTICES IN DREDGING

JUNE 16, 1994

Serial No. 103–101

Printed for the use of the Committee on Merchant Marine and Fisheries

DEPOSITORY

OCT 5

U.S. GOVERNMENT PRINTING OFFICE
81–949CC WASHINGTON : 1994

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-044827-1

COMMITTEE ON MERCHANT MARINE AND FISHERIES

GERRY E. STUDDS, Massachusetts, *Chairman*

WILLIAM J. HUGHES, New Jersey
EARL HUTTO, Florida
W.J. (BILLY) TAUZIN, Louisiana
WILLIAM O. LIPINSKI, Illinois
SOLOMON P. ORTIZ, Texas
THOMAS J. MANTON, New York
OWEN B. PICKETT, Virginia
GEORGE J. HOCHBRUECKNER, New York
FRANK PALLONE, Jr., New Jersey
GREG LAUGHLIN, Texas
JOLENE UNSOELD, Washington
GENE TAYLOR, Mississippi
JACK REED, Rhode Island
H. MARTIN LANCASTER, North Carolina
THOMAS H. ANDREWS, Maine
ELIZABETH FURSE, Oregon
LYNN SCHENK, California
GENE GREEN, Texas
ALCEE L. HASTINGS, Florida
DAN HAMBURG, California
BLANCHE M. LAMBERT, Arkansas
ANNA G. ESHOO, California
THOMAS J. BARLOW, III, Kentucky
BART STUPAK, Michigan
BENNIE G. THOMPSON, Mississippi
MARIA CANTWELL, Washington
PETER DEUTSCH, Florida
GARY L. ACKERMAN, New York

JACK FIELDS, Texas
DON YOUNG, Alaska
HERBERT H. BATEMAN, Virginia
JIM SAXTON, New Jersey
HOWARD COBLE, North Carolina
CURT WELDON, Pennsylvania
JAMES M. INHOFE, Oklahoma
ARTHUR RAVENEL, Jr., South Carolina
WAYNE T. GILCHREST, Maryland
RANDY "DUKE" CUNNINGHAM, California
JACK KINGSTON, Georgia
TILLIE K. FOWLER, Florida
MICHAEL N. CASTLE, Delaware
PETER T. KING, New York
LINCOLN DIAZ-BALART, Florida
RICHARD W. POMBO, California
HELEN DELICH BENTLEY, Maryland
CHARLES H. TAYLOR, North Carolina
PETER G. TORKILDSEN, Massachusetts

Jeffrey R. Pike, *Chief of Staff*
Thomas R. Kitsos, *Chief Counsel*
Mary J. Fusco Kitsos, *Chief Clerk*
Harry F. Burroughs, *Minority Staff Director*

Subcommittee on Merchant Marine

WILLIAM O. LIPINSKI, Illinois, *Chairman*

OWEN B. PICKETT, Virginia
GENE TAYLOR, Mississippi
THOMAS H. ANDREWS, Maine
LYNN SCHENK, California
GENE GREEN, Texas
ALCEE L. HASTINGS, Florida
JACK REED, Rhode Island
ELIZABETH FURSE, Oregon
BART STUPAK, Michigan
THOMAS J. MANTON, New York
GARY L. ACKERMAN, New York
BENNIE G. THOMPSON, Mississippi
GERRY E. STUDDS, Massachusetts (Ex Officio)

HERBERT H. BATEMAN, Virginia
JAMES M. INHOFE, Oklahoma
RANDY "DUKE" CUNNINGHAM, California
JACK KINGSTON, Georgia
TILLIE K. FOWLER, Florida
PETER T. KING, New York
LINCOLN DIAZ-BALART, Florida
HELEN DELICH BENTLEY, Maryland
JACK FIELDS, Texas (Ex Officio)

Keith Lesnick, *Staff Director*
Natalie Hidalgo Stuber, *Professional Staff*
John C. Rayfield, *Minority Professional Staff*

CONTENTS

Page

Hearing held June 16, 1994 1

Statement of:

- Bateman, Hon. Herbert, a U.S. Representative from Virginia, and Ranking Minority Member, Subcommittee on Merchant Marine 2
- Bowers, John, Sr., President, International Longshoreman's Association .. 26
  - Prepared statement 89
- Capo, James A., President, New York Shipping Association, Inc. 32
  - Prepared statement 118
- Davis, Michael, Assistant for Regulatory Programs, Office of Assistant Secretary for Civil Works, Department of the Army 44
- Diaz-Balart, Hon. Lincoln, a U.S. Representative from Florida 2
- Fields, Hon. Jack, a U.S. Representative from Texas, and Ranking Minority Member, Committee on Merchant Marine and Fisheries 14
- Fields, Jack L., Assistant Vice President, Intermodal Sales and Service, Atchison, Topeka & Santa Fe Railway Company 30
  - Prepared statement 112
- Green, Hon. Gene, a U.S. Representative from Texas 14
- Huerta, Michael, Associate Deputy Secretary, Director, Office of Intermodalism, U.S. Department of Transportation 10
- Lipinski, Hon. William O., a U.S. Representative from Illinois, and Chairman, Subcommittee on Merchant Marine 1
- Loftus, John F., Seaport Director, Toledo-Lucas County Port Authority, representing the American Great Lakes Ports 23
  - Prepared statement 66
- Menendez, Hon. Robert, a U.S. Representative from New Jersey 6
  - Prepared statement 40
- Pallone, Hon. Frank, a U.S. Representative from New Jersey 4
- Pentimonti, Gene, Vice President, Government Services, American President Lines, and Vice President, Military Affairs, American President Companies 27
  - Prepared statement 101
- Pickett, Hon. Owen, a U.S. Representative from Virginia, and Ranking Majority Member, Subcommittee on Merchant Marine 2
- Rees, Dr. Morgan R., Deputy Assistant Secretary, Planning Policy and Legislation, Office of Assistant Secretary of the Army for Civil Works ... 11
  - Prepared statement 44
- Roberts, Charles R., Executive Director, Port of Oakland, representing the American Association of Port Authorities 21
  - Prepared statement 58
- Sickles, Mark, Executive Director, Dredging Contractors of America 34
  - Prepared statement 133

Additional material supplied:

- Capo, James A.:
  - Additional question answered for the record 132
  - Article: "CN Upbeat About Intermodal's Continued Growth" 130
  - Article: "Halifax Port Tonnage on the Rise" 128
- Loftus, John M.:
  - Article from *Seaway Review* entitled, "Modal shift study findings favorable to maritime transportation" 74
  - Paper: "The Economic Impacts of the Great Lakes/Saint Lawrence Seaway System" 77
- Pentimonti, Gene :
  - Answers to additional questions 111
  - Carriers in support of American Lines' statement 110

Page
Additional material supplied—Continued
- Rees, Dr. Morgan R. (Army, Civil Works): Answers to questions for the record 140
- Roberts, Charles R.: Summary of AAPA National Dredging Policy 144

Communications submitted:
- Adamkus, Valdas (EPA): Letter of April 8, 1994, to Col. Walter C. Neitzke (COE) 86
- Bohnsack, Fran: Letter of June 8, 1994, to Carl Sobremisana (MarAd) 142
- Hull, William S. (Hampton Roads Maritime Assn.): Letter of June 14, 1994, to Carl Sobremisana (MarAd) 37
- Loftus, John M.: Letter of July 27, 1994, to Hon. William O. Lipinski with answers to questions submitted 137

DREDGING AND ITS IMPACT

THURSDAY, JUNE 16, 1994

House of Representatives,
Subcommittee on Merchant Marine,
Committee on Merchant Marine and Fisheries,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:10 a.m., in room 1334, Longworth House Office Building, Hon. William O. Lipinski (Chairman of the Subcommittee) presiding.

Present: Representatives Lipinski, Pickett, Taylor, Bateman, Kingston, Fowler, and Diaz-Balart.

Also Present: Representative Pallone.

Subcommittee Staff Present: Keith Lesnick, Staff Director; Randy Morris, Clerk; Fred Zeytoonjian, Counsel; Natalie Hidalgo, Professional Staff; John Rayfield, Minority Counsel.

Full Committee Staff Present: Carl W. Bentzel, Counsel; Sue Waldron, Press Assistant; Kip Robinson, Minority Counsel; and Margherita Woods, Minority Staff Assistant.

STATEMENT OF HON. WILLIAM LIPINSKI, A U.S. REPRESENTATIVE FROM ILLINOIS, AND CHAIRMAN, SUBCOMMITTEE ON MERCHANT MARINE

Mr. Lipinski. Good morning. I am pleased to welcome you all to the first hearing in a series of Subcommittee hearings on the topic of dredging and the vital role U.S. ports play in our national economy.

My thanks to our witnesses who are taking the time to appear here today to educate our Members on this issue. I want to extend a special welcome to the gentleman from New Jersey for testifying today. I know of his interest in this topic on the Public Works Committee, and I share his view that many of our regulations are too burdensome and do not accomplish the goals they were to meet.

I support a cleaner environment. My voting record reflects my concern for clean air and water, but I believe that many of our good-natured attempts to protect the environment with regard to dredged materials have accomplished only one thing. They have hampered growth, and the growth of commerce means jobs for Americans.

I applaud the work of the President's Interagency Working Group on dredging and the American Association of Port Authorities' proposal for a national dredging policy. I want to bring the interested parties together so we can arrive at a consensus for action on a solution that is long, long overdue.

The Chair will now recognize the Ranking Member of the Committee, Mr. Bateman.

STATEMENT OF HON. HERBERT BATEMAN, A U.S. REPRESENTATIVE FROM VIRGINIA, AND RANKING MINORITY MEMBER, SUBCOMMITTEE ON MERCHANT MARINE

Mr. BATEMAN. My apologies for being late. I have an opening statement, but I ask unanimous consent that it appear in the record without my taking the Committee's time with it.

Mr. LIPINSKI. No objection. It will be included in the record.

[The statement follows:]

STATEMENT OF HON. HERBERT H. BATEMAN, A U.S. REPRESENTATIVE FROM VIRGINIA, AND RANKING MINORITY MEMBER, SUBCOMMITTEE ON MERCHANT MARINE

Mr. Chairman, I want to commend you for holding this hearing today. Though the Port of Hampton Roads has no immediate dredging problems to contend with, I am aware of how complicated the Federal permit process is, and I am always willing to hear ways that it can be simplified, and made more efficient.

I am particularly interested in how the process can be simplified for small ports and harbors. These projects are important to the health of our regional economies, and can often take years to get approved.

Ports are the vital links through which international trade is conducted, and as world markets become more intertwined, an adequate and efficient port system becomes more crucial to our trading success.

I look forward to what our witnesses have to say today.

STATEMENT OF HON. OWEN PICKETT, A U.S. REPRESENTATIVE FROM VIRGINIA

Mr. LIPINSKI. Mr. Pickett, do you have an opening statement?

Mr. PICKETT. Not an opening statement as such, but I did receive yesterday a communication from William Hull, the Chairman of the Harbor Anchorage Dredging Committee of the Hampton Roads Maritime Association which was directed to the maritime administration concerning the option paper developed by the interagency working group on the dredging process.

The Hampton Roads Maritime Association has taken a position on the option paper that is particularly relevant for today's discussion, and I ask unanimous consent the association's comments be made a part of the hearing record on the economics of dredging.

Mr. LIPINSKI. Without objection, so ordered.

[The information may be found at end of hearing.]

STATEMENT OF HON. LINCOLN DIAZ-BALART, A U.S. REPRESENTATIVE FROM FLORIDA

Mr. LIPINSKI. Mr. Diaz-Balart, do you have an opening statement?

Mr. DIAZ-BALART. I want to commend you for holding this important hearing on dredging. It is a topic of great concern to my State and to my community. I look forward to listening to Mr. Menendez, who also has a great interest in our ports.

I would request unanimous consent, Mr. Chairman, to revise and extend my remarks for the record.

Mr. LIPINSKI. Without objection, so ordered.

Mr. DIAZ-BALART. Thank you. I would simply state, without going into depth with regard to our most unique concern in our area, that dredging is something that has been overlooked for a long period of time. The Miami River has not been dredged in over 60 years and the Army Corps of Engineers is reporting sediments are narrowing the navigable channel by as much as a foot per year. In places where the river is only 90 feet wide and vessels as wide as 50 feet routinely traverse the river, the loss of even one foot creates critical congestion.

The loss of navigable area in the river presents a very serious problem. That is why I look forward to working with the Committee in this area and appreciate the opportunity to submit my statement for the record.

Mr. LIPINSKI. Thank you very much.

[The statement of Mr. Diaz-Balart follows:]

STATEMENT OF HON. LINCOLN DIAZ-BALART, A U.S. REPRESENTATIVE FROM FLORIDA

Chairman Lipinski, I want to thank you for holding this important hearing on dredging. This a topic of great concern to my State of Florida and to my community. I would like to request unanimous consent to revise and extend my remarks for the record.

The Miami River is a major component of Dade County's infrastructure. The Miami River, with its annual $2 billion of cargo, ranks as the fifth-largest among Florida's international seaports. Cargo shipped through the Miami River accounts for approximately ten percent (10%) of Florida's port cargo value and approximately twenty percent (20%) of total cargo from Miami's Customs District 52. Approximately 80 percent of all river cargo is containerized. The remaining 20 percent is bulk.

The Miami River winds some 4 1/2 miles through the city of Miami and varies in width from 150 to 250 feet. Navigable channel depth is 15 feet on high water, 13 feet on low water.

The Miami River serves as the primary location for trade generating from the Caribbean Basin Initiative (CBI) and offers strong potential growth with other hemispheric nations.

The Miami River's unique access to Central and South America as well as the Caribbean is of great economic significance to the state of Florida. Ninety percent (90%) of all trade with the Caribbean comes through the City of Miami. The Miami River accounts for 110,000 trade related jobs.

Looking forward, when Castro falls and Aristide is returned to power, trade and vessel traffic for the Miami River is sure to boom. We must be prepared for these eventualities to maintain our lead in trade and economic strength.

The Miami River has not been dredged in over 60 years. There is no existing sediment dumping site. Without disposal options, there can be no dredging and it follows that without dredging the cargo shipping industry cannot remain competitive or healthy. This means a loss of jobs, tax revenue and productivity. Without dredging the ability to compete in international shipping will be severely hampered.The Army Corps of Engineers reports that sediments in the Miami River are narrowing the navigable channel by as much as a foot a year. In places where the river is only 90 feet wide and vessels as wise as 50 feet routinely traverse the river, the loss of even one foot creates critical congestion. Clearly, the narrowing of the channel means significant economic losses for South Florida and serious safety-related consequences for cargo shippers.

Federal response to this problem has been to ask groups to "get creative." After years of participation in community and quasi-government groups attempting to solve this problem, my constituents are now requesting that the Federal Government utilize the Miami River to demonstrate how these problems can be resolved. The location of the Miami River makes it an ideal choice, due not only to its dire need for dredging, but its strategic location in the nation and relationship to the international community. Thank you.

[A letter from Fran Bohnsack, submitted by Mr. Diaz-Balart, may be found at end of hearing.]

STATEMENT OF HON. FRANK PALLONE, A U.S. REPRESENTATIVE FROM NEW JERSEY

Mr. LIPINSKI. The Chair now recognizes a Member of the Full Committee and a guest on the Subcommittee, Mr. Pallone.

Mr. PALLONE. Thank you, Mr. Chairman. I had an opening statement, I guess it was yesterday or the day before, in the Subcommittee on Oceanography when Mr. Menendez also testified. I would like to enter that into the record.

Mr. LIPINSKI. Without objection, so ordered.

[The statement follows:]

STATEMENT OF HON. FRANK PALLONE, JR., A U.S. REPRESENTATIVE FROM NEW JERSEY

Thank you for welcoming me here today to discuss the disposal of dredged materials. The dredge disposal site, the so-called mud dump is six miles off the coast of New Jersey in my Congressional District.

The shore communities, which I represent, because they depend on clean water, tourism and fishing cannot survive if ocean disposal continues into the next decade. I was against the ocean disposal of dioxin-tainted sediments and joined with environmental groups which objected to the granting of the dredging permit for Newark Bay. I am not satisfied that capping is an effective means to contain toxic dredge materials which are suspended as they flow to the ocean bottom.

A few years ago, I sponsored an amendment to the Water Resources Development Act which prohibited the designation of a new ocean disposal site for dredge materials. EPA-Region 2 has agreed not to seek authorization for a new ocean disposal site for contaminated material. In doing so, EPA effectively set a deadline for ending ocean disposal of all but clean material once the current mud dump site is used up.

In addition, the implementation of the new green book testing manual by EPA has led to a significant volume of dredge material which is no longer suited for ocean disposal. The New York District of the Army Corps of Engineers has begun to use the new 1991 green book testing protocols and predicts that an estimated 50-75% of dredge material that used to be considered clean now qualifies as contaminated. This dredge material is now failing the green book test because of high levels of PAH's and heavy metals and not strictly because of the dioxin problem.

Unfortunately the Federal agencies were not prepared to deal with these new developments in the New York and New Jersey region. We have no disposal options other than the ocean for contaminated dredged material. The Federal Government had ten years worth of notice, but failed to address the disposal crisis. Recently, Governor Whitman established a task force to identify these short term alternatives. I urge the Federal agencies to be responsive to her leadership and work with her to identify within a very short time frame options which would be immediately available.

I am convinced that the best long term strategy is decontamination of dredge materials. To prepare for the use of decontamination technology, I introduced legislation authorizing the EPA and Army Corps to develop decontamination alternatives. In the past, Congress has approved $5 million in Federal funds to assist these efforts. Last week, a House panel earmarked an additional $1,380,000 to continue decontamination work.

At this point, a survey of existing and new technologies for decontaminating dredged material has been completed. Laboratory scale treatments are being performed. The agencies hope to proceed to pilot scale implementation in the near future. Still progress is slow, and I believe legislation is necessary to mandate a deadline for ocean disposal of contaminated dredge material.

Mr. Torricelli and I hope to introduce legislation that would establish a statutory scheme similar to what was adopted for sludge under the Ocean Dumping Ban Act. The bill would phase out ocean dumping prior to the statutory deadline and require fees for dumping in the interim based on the amount and level of contamination. The funds would be used to put in place ocean disposal alternatives.

The fees paid by dumpers would create a disincentive for dumping in the intervening years, with fees increasing as the statutory deadline approaches. To ensure that viable alternatives are actually in place within the next few years, we will work to create economic incentives for businesses to invest in technologies to contain and treat toxic sediments.

Over the last year, I have attended meetings with labor, shipping and port interests to help resolve issues relating to the pending permits in the region. These meetings, under the leadership of Mr. William Zenga, a vice president of the International Union of Operating Engineers, have been productive and responsive to many of the questions which labor and shipping have about new testing demands for disposal of dredge materials.

One thing I noted in dealing with business and labor leaders as well as environmentalist and shore communities is that there is room for compromise. A pledge of Unity was signed last Tuesday, June 12 by several parties long at odds with each other on the dredging issue. We all must have the courage to face the immediacy of this crisis and to work for both short and long term solutions.

I do not believe that the answer to our current crisis is to bypass current procedures by granting waivers or by seeking to change the permitting process. The need for dredging is real, but it must be balanced with the environmental damage which might result in each case.

Mr. PALLONE. If I could just summarize a bit, first of all to thank you, Mr. Chairman for having this hearing on such an important issue, and Mr. Menendez who has taken the leadership on trying to deal with dredging problems that we have. We worked very hard.

We are part of the group that has been meeting under the auspices of Mr. Willie Zenger, who is the vice president of the international for the International Operating Engineers, and what we found in our various meetings is that we basically favor—we recognize the need, I would say, to move permits for dredging that are pending in the New York-New Jersey harbor area.

Some of these permits have been pending for a long time, and there is no question that they are making it very difficult for ships to come into the harbor and creating a situation where oftentimes some of the shipping is going out of the country to Canadian ports.

It is very important to move on these permits, and we have made some progress, I believe, in trying to deal with the Federal agencies to get those permits moving. I think it is crucial in the whole debate on the dredging issue to try to get labor, business, and environmentalists together, not only for short-term solutions, but also for long-term solutions to the problem.

Mr. Menendez introduced a bill that seeks to address some of these long-term alternatives and has been in the leadership in trying to move on decontamination technology which I think is ultimately the solution to our problem.

The other thing happening in New Jersey is that the governor recently announced that she is putting together a task force to try to come up with short-term alternatives.

The mud dump site, the site where contaminated dredge material is dumped for the New York-New Jersey harbor is six miles off the coast of my district, not far from where I live, and we are very concerned about continued dumping of contaminated dredge materials their.

We realize that we need to have alternatives and some of the alternatives Mr. Menendez mentioned, such as burrow pits, containment islands, are something that I think that we also need to look into and try to move on very quickly if possible so we don't have to continue dumping in the ocean.

I just wanted to commend my colleague again for what he is trying to do. I am going to stay and hear what you have to say, but I am not going to go through my statement again because we already went through it the other day.

Thank you, Mr. Chairman.

Mr. LIPINSKI. Mr. Taylor.

Mr. TAYLOR. No thank you.

Mr. LIPINSKI. The Chair recognizes Mr. Kingston.

Mr. KINGSTON. No opening statement.

Mr. LIPINSKI. Mr. Menendez, Congressman Menendez is our first witness this morning. We appreciate very much you coming here. We are well aware of the time and energy which you have already put into getting something done about this particular situation, and we are here to work and cooperate with you as much as possible to achieve your goal.

The floor is yours.

STATEMENT OF HON. ROBERT MENENDEZ, A U.S. REPRESENTATIVE FROM NEW JERSEY

Mr. MENENDEZ. Thank you, Mr. Chairman. I want to thank you and Mr. Bateman, the Ranking Member, for calling this hearing, in terms of the foresight, I think one of the Nation's resources that we often overlook.

I appreciate the opportunity and the invitation to come before you, and I ask unanimous consent to include my entire testimony in the record.

Mr. LIPINSKI. Without objection, so ordered.

Mr. MENENDEZ. When I used to deal with the question of infrastructure as a former mayor, as a former State assemblyman, and a former State Senator, I always thought of it in terms of roads and bridges and airports and our sewer systems.

Infrastructure actually means below the surface, and in fact in the case of the questions of our ports, it is not only below the surface, but below the water.

On the question of port competitiveness, our crisis is that, in fact, we have let many of our Nation's ports' silt, for example in the New York-New Jersey Harbor, from 35 or more feet in depth to 19 feet in depth. That in essence does not permit the cargo ships that bring in admittedly 95 to 99 percent of the world's foreign commerce into our Nation and vice versa, export from our Nation to other parts of the world.

I often wonder how did we ever let it get to that point. In my area alone, 180,000 jobs are at stake as well as $20 billion of economic activity. Some may say this is a regional problem, but I would say it is not. The Sierra Club noted that nationwide we are talking about 10 million jobs and $400 billion in economic activity in virtually every harbor in the Nation.

President Clinton had to intervene at the Port of Oakland where dredging permits has been delayed in some cases up to 22 years. That is certainly government out of control. A container ship had to bypass the Port of Boston recently because the undredged harbor is no longer deep enough to allow a vessel of this size to make the harbor passage safely at low tide.

Last winter, the Port of Richmond, Virginia forced ship lines to load fewer containers and reroute freight because of silt deposits. Port Canaveral in Florida has the same problem. The delay is due to a large degree, I believe, to bureaucratic inertia, because there are questions of dueling agencies with tandem jurisdictions, sequential jurisdiction, that delays the process as well as the question of contamination in some ports.

In the Port of New York and New Jersey, the amounts of contamination and the sediment are measured in parts per trillion. To give you a sense of balance here, a part per trillion might be considered as one second in 31,690 years. One trillion of a gram is 1 million times more toxic than the threshold of dioxin toxicity—1 million times less.

Now, studies have shown that most of us in this room, Mr. Chairman, probably have roughly the same level of contaminants as the sediments that we do not permit to be disposed. Each day the contaminated silt and the questions of those ports that have contamination is left uncontained, the contamination spread further in open waters.

Each time a ship strikes the bottom of one of these locations, it moves the uncontained contaminants sitting in the open waters further into the open waters, diluting its locations instead of having hot spots which could be more easily identified and hopefully remediated, moving it into the food chain that everyone is concerned about.

The 1993 test results in our port compared to test results in 1990 showed that concentrations were significantly less than when originally tested. That means that they were dispersed. So my question is, can allowing, in the case of the contaminants of dioxin, allowing them to sit in open waters clearly be a better vital response than to seek as we solve long-term solutions—and I embrace Mr. Pallone's comments and everyone, both those who consider themselves "environmentalists," and many of the people you will hear from today, there is not a man or woman whom I have dealt with on this issue who takes a back seat about their concern on the question of environment.

The fact of the matter is we are all concerned about that. But there are some immediate realities. Some of those immediate realities are that we do not have the technologies at the scale that we need for decontamination.

Last week in the DOD authorization bill, I was able to get an amendment to have DOD put out a blueprint of a series of technologies that already the government has paid for that can be transferred to our ports for decontamination purposes. The cone penetronmeter, hydrogen reduction efforts—some will be for detection and some for decontamination, but none are at the scale presently to be able to deal with the decontamination issue.

So, yes, we embrace the long-term efforts and we hope the Government will pay attention, which it has not in the past, which has put us in the fix that we are in. But in the interim, the question is the 10 million jobs and the $400 billion of economic activity.

What do we do? We believe that there are basically two areas that we need to deal with. One, we believe there is substantive legislative guidance that is needed, and that is why I introduced the Harbor Environmental Dredging and Management Act which is before the purview committee.

The bill establishes a definitive time limit on the ocean disposal and relocation permit process. All Federal agencies would make a decision on a permit within 165 days after receiving an application. Right now there are no timeframes for the most part.

In the case of the Port of New York and New Jersey, permits are between three and eight years. That is government out of control to get a decision.

The other problem is that through this permit process, there have been changing standards. One of the things we seek to do in the bill is to have the EPA come up with a national standard in which dioxin in terms of its disposal is considered a problem in terms of any form of ocean dumping, or in terms of any form of other disposal, other than a decontamination process or an upland hazardous waste disposal sites.

We are not talking about highly toxic terms because those have already been barred by the Ocean Dumping Act of 1988. We are talking about trace contaminants, which the law talks about, but does not define and, for the most part, the agencies do not define.

Then we go on to a process in which what exists is a moving target for a permittee. The standards in terms of this ocean dumping for not highly toxic materials but trace elements have moved at least three times. Each time the permittee is asked to come up with a higher standard, so one of the other things that we say in the Harbor Dredging and Management Act is once a permittee enters in on a standard, that is the standard by which they will be tested. If the standard changes in the future, then a new permittee would be tested on that standard unless immediate health and hazard is an issue, and therefore the existing permittee already within the process would be subject to that.

We permit consortium permitting so that for smaller companies, not the major ports, but smaller companies that need to do dredging, can get together. We bring in the Army Corps of Engineers, the EPA, NOAA, all with jurisdiction here, but which work in a process in which the Army Corps goes first, EPA can come in after they have made a decision, virtually to issue the permit, stop that process because of issues they raise.

NOAA can come in subsequently to that; so we have tandem or sequential jurisdiction which doesn't put everybody together solving the problem from the beginning hence three, eight years, or in the case of Oakland, over 22 years.

Mr. Chairman, I know the Committee has a lot of testimony, so I won't go further. Let me simply say that what is at stake at a time that we see many of us heralding greater international trade, hemispheric economic integration, what is at stake is billions of dollars in economic activity, especially will we be able to answer the call. We cannot when ships cannot come into our ports. We already lost shipping to other parts, not of our country, but of the world.

We lost shipping to Halifax, Canada. We have the potential of losing shipping to Veracruz, Mexico. If that is where the shipping goes, you can imagine what is the loss of economic activity, what is the loss of employment, what is the loss of opportunity in terms of higher cost to our consumers as the routes from which the ultimate products, many times products, for example, farmers which may not see that they have a stake in this—they ship their products ultimately to many parts of the world through our shipping.

If they must take longer routes to accomplishment, that is a higher cost at the end for the consumer and for the ability of those producing the products to do it. We are all interrelated in this, yet we have not seen this crisis, and I say a crisis because we have very difficult questions in the Port of New York and New Jersey and throughout the Nation.

The question of being able to dredge now is a real problem. It is also a problem for our defense. In my district there is an ocean terminal which had six bays, it now has one. It was the location where the majority of forward power for Desert Storm and Desert Shield was sent. It will lose its mission if it cannot dredge. If it cannot dredge, it cannot have the container ships that will do it, plus we are waiting for an environmental disaster Mr. Chairman.

What is happening now is in order to accommodate some of the trade, the cargo ships are lightering, off-loading some of their goods, some of their oil in the middle of the bays, in the middle of the different ports outside of their berth, so that they can be lightened and come in and berth.

If we have an incident where we have a ruptured ship, then we will have a major environmental problem; when we have the lightering of the barges be struck, as it was in the Port of New York and New Jersey Harbor by another ship, we will have a major environmental problem.

The time to act is now. I appreciate the Committee's attention and your foresight in looking at an issue that really needs our attention for economics, for jobs, and for the Nation's security.

Mr. LIPINSKI. Thank you very much.

[The statement of Robert Menendez may be found at end of hearing.]

Mr. LIPINSKI. I appreciate your informative and persuasive testimony, and I congratulate you on your leadership on this particular issue.

Are there questions of this witness? Thank you very much for your attendance. We certainly appreciate it.

Our next panel will be Hon. Michael Huertase, Associate Deputy Secretary, Director, Office of Intermodalism, U.S. Department of Transportation, Dr. Morgan R. Rees, Deputy Assistant Secretary, Planning Policy and Legislation, Office of the Assistant Secretary of the Army for Civil Works.

Good morning gentlemen. Welcome. I would like to say right now I appreciate very much you being here. I am sure all the Committee Members do. We would also appreciate it very much if you would have the opportunity to remain afterwards and listen to the witnesses who are going to follow you.

I can see that you are joined by another individual. Would you identify him for us?

Mr. REES. This is Michael Davis, Assistant for Regulatory Affairs in the Office of the Assistant Secretary for Civil Works.

Mr. LIPINSKI. Thank you very much. Mr. Huerta.

STATEMENT OF MICHAEL HUERTA, ASSOCIATE DEPUTY SECRETARY, DIRECTOR, OFFICE OF INTERMODALISM, U.S. DEPARTMENT OF TRANSPORTATION

Mr. HUERTA. Thank you, Mr. Chairman and Members of the Subcommittee. As you know, I am Michael Huerta, the Associate Deputy Secretary of Transportation and Director of its Office of Intermodalism.

I would like to thank the Subcommittee for the invitation to testify today and for recognizing the important role that ports and transportation play in maintaining and improving the United States' ability to compete in global commerce.

Addressing this and other important maritime problems requires that our Department and you in the Congress work closely together in partnership to assure our laws and regulations promote commercial and environmental interests in the most effective manner possible as we face the major issues affecting our Nation's maritime community.

Mr. Chairman, the Department deeply appreciates the strong support you and the other Subcommittee Members have given to assuring the competitiveness of the U.S. merchant fleet. We look forward to our continued cooperation in obtaining prompt House consideration of the maritime reform measure. Together, we can enhance the ability of this transportation mode to participate most effectively in stimulating our economy and heightening the effectiveness of our national transportation system.

As former Executive Director of the Port of San Francisco, I am keenly aware of the critical need for ports to maintain their key waterside links through the dredging of access channels and of berthing areas. With the substantial investment this Nation has made in landside access, it makes little sense to ignore the waterside connections that dredging maintains or makes possible. I also am aware from my own personal experience, that although dredging is controversial, it is possible to create constructive dialogs which lead to positive solutions enhancing port competitiveness while respecting the environment.

Ports play a crucial role in our economy. About 95 percent of all U.S. exports and imports pass through our seaports. In other words, ports provide the first and last connections to our national transportation system as raw materials, consumer goods, and other essential products flow into and from our factories and stores, as well as those of other countries.

Our Nation has developed the world's most efficient network of linkages—truck, rail, and water—connecting ports to our manufacturing and our distribution centers. In order to continue the effective movement of commercial goods, all aspects of this vast chain must be equally up to the task.

Because a chain is only as strong as its weakest link, we must assure that our landside infrastructure is matched by sufficient waterside improvements and investments. Adequate access to channels and berthing areas are critical in accommodating the deep-draft ocean-going vessels that unite the world's economies.

Time is another important component of this network. As more and more U.S. manufacturers adopt increasingly sophisticated logistics and inventory systems, the key ingredient is to eliminate waste, both in production times and in the production materials. Many factories operate with as little as 15 minutes of stock on hand so that the plant is being served by a constant stream of transportation vehicles.

Compressed production schedules affect not only landside transport vehicles. One maritime liner carrier conducts 35-day Pacific round trips with only 19 hours of slack time built into them. When a maritime carrier already operating on a tight timeframe has to interface with a 15-minute window, there is no room for port inefficiencies. Twenty years ago, a ship could wait for a tide and a truck could deliver goods tomorrow. Today, such delays shut down assembly lines.

The Administration is well aware of the need to assure effective waterside access to our ports. In a recent letter, President Clinton called on Federal departments and agencies "to redouble their efforts to resolve the navigational and environmental concerns that have long stymied dredging, and urge the State, local, port, environmental, and other interested groups to continue their joint efforts to find solutions to these problems."

I am pleased to report that we at the Department of Transportation, with the participation of the other agencies in the Administration, have heeded this call. Secretary Peña convened an Interagency Working Group on the Dredging Process. Next month, the Interagency Working Group will report on this important issue, identifying ways to improve existing dredging processes both nationally and locally.

The Working Group effort recognizes our national interest in maintaining the integrity of the entire transportation and distribution system. It seeks to increase certainty and predictability to the process of dredging and dredged material disposal, consistent with the goal of environmental protection.

Thank you for the opportunity to present the Department's views on an issue, which is critical to our Nation's ability to compete effectively in today's global economy, and to assure that adequate attention is focused on all segments of our national transportation system. I would be happy to answer any questions you may have.

Mr. LIPINSKI. Thank you very much.

STATEMENT OF DR. MORGAN R. REES, DEPUTY ASSISTANT SECRETARY, PLANNING POLICY AND LEGISLATION, OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS, ACCOMPANIED BY MICHAEL DAVIS, ASSISTANT FOR REGULATORY PROGRAMS, OFFICE OF ASSISTANT SECRETARY FOR CIVIL WORKS

Mr. LIPINSKI. Dr. Rees?

Mr. REES. Mr. Chairman and Members of the Committee, I am Morgan Rees, Deputy Assistant Secretary of the Army and am pleased to be here today on behalf of Dr. John Zirschky, the Acting Assistant Secretary of the Army for Civil Works.

With me is Michael Davis, Assistant for Regulatory Affairs in our office. We appreciate the opportunity to testify on this most important issue.

I would like to summarize my statement if I may and submit the full statement for the record. You requested our views on the importance of dredging to the national economy and the national transportation system, dredge material disposal costs, Federal cost sharing, and our plans to improve the dredge material disposal process, including the regulatory process.

I have worked in the area of dredge material and disposal of dredge material since 1973 when laws governing this activity were first developed. It is clear to me that the health and competitiveness of our Nation's ports, their contribution to the transportation network, and the critical role that they play in our national economy has received too little attention.

Mr. Huerta and members of the next panel have extensive expertise in these areas and I will defer to them to address specifics. However, in previous hearings on dredging and disposal of dredge material in other committees, we have heard from port and other maritime interests about the devastating economic impacts on port development, employment and regional economies resulting from long delays in dredging operations.

We concur with those statements, and I would add to that list the impact on Federal investment. In developing Federal dredging projects, the Corps of Engineers conducts thorough studies of economic, environmental, and engineering feasibility of dredging proposals.

Only after these studies are successfully completed are projects authorized through legislation with the support of the President and Congress. Significant Federal investments are then made constructing the channels.

As part of this analysis, the Army calculates a benefit to cost ratio which compares the economic return of the Federal investment to the invested cost. Only environmentally sound projects with favorable benefit to cost ratios receive administration support.

Of course a project can generate an expected return only if it functions as it is intended. Whenever dredging is delayed, the return on the Federal investment is also delayed. The longer the delay, the greater the loss of the potential return.

Because the initial investment in channel dredging is sunk capital, the marginal return that we realize on maintenance dredging costs becomes an extremely valuable Federal investment. We have studied the economic benefit of channel maintenance in several harbors considering the initial dredging as sunk costs and find that the marginal return on maintenance dredging activities ranges anywhere from about $10 to as high as $20 for every $1.00 invested.

One can readily see that delay in reaping those benefits can be very costly. Please don't misunderstand; we do not for a minute suggest any relaxation of environmental criteria governing the process. Rather we see the potential of anomaly in the interest making large investments in dredging activities on the one hand and failing to take advantage of those investments on the other.

This demonstrates a critical need for all interests to work together to find appropriate solutions and avoid the delays that we have experienced. Economic benefits are not isolated to the port and maritime industry. They are distributed throughout the economy.

Delays in dredging are not just problems for the Corps of Engineers or for the ports. They are problems for the entire Administration, for the Congress, and for the taxpayers. We must broaden participation in finding solutions to the problems beyond the Corps and the ports.

All interests must help by becoming involved in the analysis of options rather than simply reacting once options are proposed. Water quality agencies must prohibit the discharge of pollutants for which the Corps and the ports later bear the burdens of cleanup and the polluters must share in the burdens of the cost of the cleanup.

Dredge material disposal costs vary greatly depending on the nature of the material, the methods of disposal, and the potential location of disposal sites. We believe strongly that all disposal options must be considered on an equal base.

We call this the multimedia approach. That means that any particular option should not be placed off limits in isolation of full consideration of the relative effect of all other options. To place any one option off limits without such a full analysis may well force a decision to pursue more environmentally damaging and more costly alternatives than needs be.

You asked us to discuss cost sharing. This is a very complex issue and not easily resolved. We agree with those who have said the existing system contains unnecessary anomalies. We are in the process of reevaluating cost sharing options for disposal of dredge material and expect modifications to the current cost sharing arrangements to be addressed in the Water Resources Development Act of 1994.

We look forward to working with Congress, the maritime community, and other stakeholders to reach a consensus on equitable cost sharing for disposal of dredge material.

Regarding improvements to the dredging process, several significant events have occurred recently and several other strong initiatives are under way. Last year the President's task force on the regulatory program conducted an extensive review of that program and made significant recommendations for improving the process.

Those improvement are being implemented. Issues involved in dredging New York Harbor have highlighted the need for clarification of certain aspects of the program and improvements have been made there.

The Department of Transportation convened an interagency working group on the dredging process and that group is nearing completion of its deliberation which includes extensive public involvement and expect to issue a report next month describing options to improve the process.

On a more specific level, the Corps of Engineers is pursuing development of long-term dredge material management plans at 13 harbors and development plans will begin at seven others in 1995. The objective of those plans is that when maintenance dredging of the Federal navigation channel or the berthing areas by the port interests is required in the future, sites will be available, disposal conditions will be known, and decisions will be reached quickly.

This concludes my statement. Mike Davis and I will be pleased to respond to any questions.

Mr. LIPINSKI. Thank you very much Dr. Rees. Your full statement will be accepted into the records without objection.

[The statement of Dr. Morgan R. Rees may be found at end of hearing.]

Mr. LIPINSKI. I also have statements from the Ranking Minority Member of the Full Committee, Congressman Fields, and Congressman Green. Without objection, we will accept these statement into the record also.

[The statement of Hon. Jack Fields follows:]

STATEMENT OF HON. JACK FIELDS, A U.S. REPRESENTATIVE FROM TEXAS, AND RANKING MINORITY MEMBER, COMMITTEE ON MERCHANT MARINE AND FISHERIES

Mr. Chairman, I am pleased that you have scheduled this hearing to focus attention on the serious problems that many American ports are experiencing as a result of the inability to conduct dredging operations.

There is hardly a port in the United States that is not facing major problems and conflicts associated with dredging and the disposal of the dredged material from harbors and channels. We cannot allow this situation to continue in the future.

Let me highlight an example of this problem. Since 1968, the Port of Houston has been trying to have its channel widened from the current 400 feet width to 530 feet, and deepened from the current 40 feet draft to 45 feet. There is something terribly wrong with a process when it takes 26 years to complete a dredging project.

The Port of Houston serves nearly 100 shipping lines that connect the port with more than 250 ports throughout the world. The port is currently the number one U.S. port in international tonnage, and the third largest U.S. port in total domestic and international tonnage. It is also the seventh busiest port in the world and generates nearly $3 billion a year in revenues. An estimated 29,000 people work in jobs directly related to port activities and another 110,000 jobs are indirectly related to the port's activities.

It is positively incredible to me that the continued future of these jobs, and the revenues generated by the shipping activities in this port, could be jeopardized by bureaucratic delays and conflicts over how to dredge the Houston Ship Channel.

The American Association of Port Authorities once identified more than 30 Federal laws and Executive Orders that are controlling when planning and carrying out dredging activities occur. This does not include all the various State and local laws and ordinances that apply.

I was encouraged when the Administration created the new Interagency Working Group on the Dredging Process. Hopefully, this Group will develop recommendations on ways to streamline the permit process that will bring an end to horror stories. Houston's horror story has been repeated in virtually all of the Nation's major ports. We cannot afford to allow our international commerce to be frustrated by this complicated and lengthy dredging review process.

Mr. Chairman, I hope that today's hearing will help us find a solution to this problem. I look forward to the testimony of our witnesses today and urge them to be specific in the recommendations.

Thank you, Mr. Chairman.

STATEMENT OF HON. GENE GREEN, A U.S. REPRESENTATIVE FROM TEXAS

Good morning and thank you, Mr. Chairman. I would like to welcome our witnesses who will be testifying before our Subcommittee today.

I am pleased our Subcommittee is holding this hearing on the economic impacts of dredging. This is very important to the Port of Houston, which I represent. We are facing a dredging crisis in Houston and I am concerned about the impact it will have on the economic status of the Port of Houston.

If we do not preserve and improve our ports we face the possibility of diversion of cargo to foreign ports. We run the risk of losing jobs—those of longshoremen, workers in the railroad, trucking, and shipping industry.

I believe we must find remedies to solve problems with the permitting process. Earlier this week the Subcommittee on Oceanography, Gulf of Mexico & the Outer Continental Shelf held a hearing on dredging. I was amazed to hear testimony that in one case it took 22 years to get a permit for dredging. It is very critical that we take action to prevent these sort of delays. Whether it is administrative or legislative action, we must act now.

I look forward to hearing testimony from our witnesses and their ideas on how to address the dredging crisis. Thank you, Mr. Chairman.

Mr. LIPINSKI. The Chair now recognizes Congressman Pickett for questioning.

Mr. PICKETT. Thank you, Mr. Chairman. Dr. Rees, what is the fundamental difficulty that we are confronted with in the area of dredging?

It doesn't appear to be a matter of knowing the technology or having the equipment or the ability to actually perform the dredging work.

What I am beginning to see here is that we appear to be bogged down in the procedural aspects of the dredging process.

Mr. REES. I guess I would characterize the main problem as an absence of consensus about the nature of the environmental effects of disposal of the dredge material. The process itself, with which to reach decisions, is, in my judgment, a satisfactory process.

There are time limits involved, et cetera. But when there is an absence of consensus among the relevant agencies and other interests at the Federal and State level, we have had a difficult time bringing the interests together to reach consensus.

The interagency working group, that we mentioned, that DOT has formed, we are hopeful will provide a focus to get over some of those long-standing disagreements on the nature of the impacts, the environmental impacts of disposal, and to put the decisions in a larger context, as I mentioned in my testimony, that would include consideration of how the ports fit into the transportation network and how we are reaping or not reaping the benefits of Federal investments.

Mr. PICKETT. You mean there is some doubt in somebody's mind about the importance of ports to the trade of this country?

Mr. REES. I don't know whether any people doubt the importance, but sometimes the debate on disposal of dredge material has focused more on the specific environmental effects and less on the broader implications of the decision process.

Mr. PICKETT. I understand that answer to be that the bureaucratic red tape is keeping progress from taking place, is that a fair summary?

Mr. REES. I wouldn't make that characterization.

Mr. PICKETT. The point that I think all of us are concerned about is the fact that time is money, and a lack of ability of Federal agencies to cooperate and reach consensus causes delay and this delay becomes expensive in a lot of different ways.

These costs often are not calculated and reflected in the final outcome of a particular project. That to me is a grave concern.

Secondly, I would like to know if there have been any scientific studies conducted on the effects of dredging which has taken place in the past? Certainly there has been enough of it to have a record of what would happen when you displace material and relocate it to show whether there have been adverse effects that have resulted from the dredging that has taken place in the last 200 years in this country.

Mr. REES. There are extensive studies based on monitoring of dredge material disposal sites and the results are very site specific. There have been some adverse effects identified in some cases.

Part of the problem with reaching consensus, as I mentioned in response to the previous question, is that the vast majority, I would venture to say, all of the cases that we deal with are very site specific in terms of the interaction of dredged material and the environment into which it is being placed, and there is a tendency to be cautious on the side of environmental protection in reaching decisions when there are uncertainties involved.

Mr. PICKETT. Why should there be uncertainties about relocating material today when we have been doing it for a couple hundred years in this country and apparently don't have adverse impacts as a result of that?

Mr. REES. We haven't looked for adverse impacts until the past 15 to 20 years, once the Clean Water Act and Ocean Dumping Act were enacted and we got into monitoring disposal sites and assessing impacts.

Prior to that, we don't have much data to show whether there were impacts or not.

Mr. PICKETT. There were no obvious impacts because you haven't mentioned any.

Mr. REES. There were no base line tests taken, so there was no way to measure what the impacts were by comparing them with baseline tests, because we didn't have any.

Mr. PICKETT. Is the fact that there is no single government agency with responsibility and authority in the area of the disposition of dredge material a problem?

Mr. REES. If you had asked that question about 10 years ago, I would have said an emphatic yes, but I believe that is not the case any longer.

I think in the past five years, the agencies involved have come to work together very closely. There are still differences, but those differences are narrowing almost daily because we meet on a regular basis, we work together, I think, in a very cooperative spirit, and I expect that trend to continue.

Mr. PICKETT. What one single thing could we do today to speed up and lower the cost of dredging projects?

Mr. REES. That is a very difficult question.

Mr. PICKETT. It was intended to be.

Mr. REES. I guess I would simply have to say that the solution in individual cases is very site specific. I think the generic process that we have developed is a good process.

When it gets applied to widely varying individual case circumstances is when the difficulties come up. I think—my sense is the results of the interagency working group will lead the way to issue resolution mechanisms that perhaps don't exist today.

Part of the problem is that some of these issues linger and linger and linger because there was no and has been no explicit issue resolution process, and I am hopeful that we will identify one in this interagency report.

Mr. PICKETT. Thank you. Thank you, Mr. Chairman.

Mr. LIPINSKI. Thank you Mr. Pickett.

The Chair now recognizes Mr. Kingston.

Mr. KINGSTON. No questions.

Mr. Bateman left.

Mr. LIPINSKI. Yes. He had to take care of something. So you were the next one up, but in light of the fact you have no questions at this time, we will ask Mrs. Fowler if she has any.

Mrs. FOWLER. No, Mr. Chairman, but thank you for having the hearings because I do share the concerns expressed here about the need to get the process expedited having two ports in my district.

We need to move forward and see what we can do to help our ports. I appreciate your holding this hearing today.

Mr. LIPINSKI. Mr. Taylor.

Mr. TAYLOR. I would like to compliment the Chairman on having these hearings. Dr. Rees, I notice, while I have been associated with government, that the Corps has kind of taken the extreme positions with regard to dredging in my life time.

I guess the original Corps attitude was the old dredge and fill, where is the cheapest place to put the spoil. If it means putting it in an oyster bed, we will cover up the oyster bed.

Somewhere the Corps went to the other extreme, in particular with the delay and final dredging of the Gulf ship channel, to where they went to extremes to avoid the oyster beds, they went to extremes to mandate thin layer disposal, and went to the further extreme of calling for the ocean disposal of the dredged material out of the Gulf Port Harbor itself, very costly and slow.

What seems to be missing though, especially in areas like the Chesapeake Bay, especially in areas where we have great coastal erosion like the coast of Mississippi, Louisiana, and what I presume is going on in Texas is something in between.

I haven't seen the Corps make much of an attempt to be creating some of these coastal marshes that have been lost over the years either through erosion, like in Louisiana, or through failing, like in my home State, and take the dredge spoil, since, by everyone's admission, coastal marshes are some of the most valuable property as far as helping the environment and the seafood industry since they provide a tremendous value in stopping that storm surge as it works its way into Gulf Coast communities, since it filters the water from the rivers coming out before it hits the ocean, and since the work of people like Dr. Woolverton have proven that many of these plants are particularly adept at filtering heavy metals out of the water, why has not the Corps placed a greater emphasis on the creation of coastal marshes with dredge spoil?

I would think, for example, the dredging of Back Bay, Biloxi Bay is a perfect opportunity to do that. I hear the Corps is contemplating pumping the dredge spoil six or seven miles inland. Just the magnitude of the pumping costs have to be substantial.

We saw in the case of Gulf Port where you had a take a hopper crane one scoop at a time and take the dredge spoil approximately 20 miles offshore to be dredged. There has to be a better way.

Why isn't the Corps looking for a better way? Is there something in the law that prevents you from doing that that we can address?

Mr. REES. You have raised a point that is near and dear to my heart. I agree heartily that we have done less than we should in that particular area, and I don't mean geographically, but in the beneficial uses of using dredge material to create aquatic habitat, to create wetlands, to prevent beach erosion problems, et cetera.

About four years ago, I guess, in the context of similar hearings, the Corps was briefing me on what we call the beneficial uses of dredge material, and that concept had been an integral part of the Corps' program activities for many, many years, and so I asked the Corps to provide me a list of specific sites and types of beneficial uses that had been undertaken. And it turned out that there were a few, but not many.

So we looked into why that was the case, why weren't we doing better in that area? The biggest single reason was that there was a funding problem that nobody—the Corps didn't have the authority to spend the extra money it might take to use the material in a beneficial way, and nobody was stepping forward to pay that difference.

So we sought legislation and got legislation in the Water Resources Development Act of 1992 to allow the Federal Government to pay 75 percent of that incremental cost if there was a non-Federal sponsor who would come forward and pay 25 percent.

So we believe we have the authority that we need now. It is a little early to tell the results because, as you are aware, it takes a couple of years to study and coordinate those kinds of projects. We have begun to do some more of the beneficial use types of activities. One prime example that in fact was under way before we got the additional authorization was the disposal of the dredge material from the Port of Houston, about a $100 million incremental cost to build extensive wetlands and wildlife habitat in Galveston Bay.

We are certainly willing to do that when and wherever the opportunities arise with the only caveat that we do believe very strongly in the 25 percent non-Federal share. We believe that the States might want to come forward and support that sort of thing.

The ports themselves might want to do that. Environmental organizations might want to do that, and we have developed internally and have not gone public with it yet, a program to educate people to the availability of this cost sharing opportunity so that people who may want to cost share in it and either don't know about it or haven't had an opportunity will have.

We are more than willing to use the dredged material in a beneficial way wherever we can.

Mr. TAYLOR. Refresh my memory now. If given the option of deep water disposal for dredge material or creating a coastal marsh with it using it to, in the case of Pascagoula, Mississippi, to protect an historical landmark, an old lighthouse that is getting ready to wash away because of erosion, if you went to the Jackson County Port Authority and said we can take your spoil in deep water and dispose of it and the Federal Government picks up all the tab, or we could ask you guys to pay a quarter of the cost of saving that old lighthouse, what do you think their reaction is going to be, unfortunately?

Mr. REES. Perhaps I didn't explain it properly. We are talking about 25 percent of the incremental. In other words, say it costs X dollars to take the dredge material offshore and it costs X plus Y dollars to protect the lighthouse. We would look for cost sharing only on that Y part, in other words, only on the incremental part, so that the Federal Government would continue to pay the full amount of whatever it would pay for the normal disposal activity.

If it is $100 to put it offshore and $110 to protect the lighthouse, we would seek the cost sharing on only the $10 portion of that cost.

Mr. TAYLOR. Conversely—I am just—I was in the marine towing business briefly and the cost of moving this material has to be enormous. I believe in many instances it is a heck of a lot cheaper to create a coastal marsh with it.

Is there some sort of reward that the locals would get for forcing your hand that way since it in turn would save the Nation some money?

Mr. REES. I would hope——

Mr. TAYLOR. I am asking for some guidance.

Mr. REES. If creating the coastal marsh is the least costly environmentally acceptable alternative, then that would be the one we would implement with no additional cost sharing.

In other words, the Corps analyzing what the options are and they identify the one that meets all the environmental criteria, that is the environmentally sound disposal option that is also the least costly.

Those costs are assigned to the navigation maintenance activity. It is very important that we distinguish between the cost that is allocated to navigation and the cost that is allocated to environmental enhancement because the cost that is allocated to navigation comes out of the harbor maintenance trust funds and the cost allocated to environmental enhancement would come out of general revenues in order to properly use the harbor maintenance trust fund for which it was intended.

I don't know if I am being clear.

Mr. TAYLOR. I think you are speaking very clearly. What I am missing, what I hope you can provide some guidance on is that of the ongoing requests for maintenance dredging or the actual deepening of channels around the country how many instances are you looking at this as an alternative.

Because I know that in the case of dredging Biloxi and the deepening of the Pascagoula Ship Channel, the Corps has not looked at any of those options, and I would think the coast of Mississippi is the perfect place to try it.

Mr. REES. I don't know the particulars of the cases you cite, but in general terms, the options we are talking about for beneficial uses are supposed to be examined in all cases. A continuing requirement is to look at the opportunity for beneficial uses in every circumstance.

If that is not being done, then we can fix that simply by making sure the field offices remember that that is what they are supposed to do. But there is no impediment now in the system to seeking out beneficial use alternatives.

Mr. TAYLOR. You don't need any change in the law?

Mr. REES. No, we don't.

Mr. TAYLOR. Thank you, Mr. Chairman.

Mr. LIPINSKI. Thank you Mr. Taylor.

Mr. Huerta, in the absence of legislative action, what is your outlook for significant improvement or changes in the dredging process to make it more efficient?

Mr. HUERTA. Mr. Chairman, the Interagency Working Group is looking at a broad range of options which may or may not include legislative changes to the process. We are expecting its report next month. At that time, the Secretary will be briefed as well as the heads of the other Federal agencies. We expect we would have a better sense at that time as to what changes we might need in legislation, if any.

Mr. LIPINSKI. Can you give us a hint on how the Committee is moving along?

Mr. HUERTA. I think it is moving along pretty well by bringing all the parties together and identifying where there are procedural issues, as well as trying to identify the Federal objectives with respect to dredging.

The Department's interest in this is preserving the integrity of the entire transportation system so we would like to see as efficient a process as possible which is environmentally sensitive. We firmly believe that it is possible to square those two objectives with one another.

Mr. LIPINSKI. It seems to me that because of all the agencies that are involved here, that there is very little if any dredging that is going on, and the lack of dredging is slowly strangling our ports, and it is cutting down our productivity and economic development, and it is costing American jobs.

In our economy today, I think the thing we should be aiming for more than anything else is creating jobs. So I hope that this interagency group can come up with some very strong recommendations on how we can continue to reasonably protect the environment, but also get on with doing business, creating economic development and creating jobs.

I thank both of you gentlemen for being here this morning. I appreciate your testimony. As we had mentioned earlier, this is the first in a series of hearings, and as the Committee becomes more familiar with the details of this particular issue, we will no doubt be inviting you back in the future, and other governmental agencies that are involved in this particular issue will also be asked to come back.

We will, at that time, try to solicit more information from you so we will be in a position to either support the recommendations of the interagency group or perhaps go forward with legislation we feel is necessary to accelerate this process.

As I mentioned when you started your testimony, I would personally appreciate it if you would remain and listen to the testimony of our next panel.

Thank you very much gentlemen.

Mr. REES. Thank you, Mr. Chairman.

Mr. LIPINSKI. Our next panel is comprised of Mr. Charles R. Roberts, Executive Director, Port of Oakland, representing the American Association of Port Authorities, Mr. John M. Loftus, Seaport Director, Toledo-Lucas County Port Authority, representing American Great Lakes' Ports.

Mr. John Bowers, Senior President, International Longshoreman's Association. Mr. Gene Pentimonti, Vice President, Military Affairs, American President Companies. Mr. Jack Fields, Assistant

Vice President, Intermodal Operations, Atchison, Topeka & Santa Fe Railway Company.

Mr. James A. Capo, President, New York Shipping Association, Inc.. Mr. Mark Sickles, Executive Director, Dredging Contractors of America.

After that introduction, I shouldn't have to say another word for the rest of the hearing. I want to say that the Atchison, Topeka and the Santa Fe has a very warm spot in my heart. They are probably the largest switching yard located in my district. I also have to say that my favorite train route is the Burlington Zephyr.

I think we have digressed enough and we will now listen to our first witness, Mr. Roberts.

STATEMENT OF CHARLES R. ROBERTS, EXECUTIVE DIRECTOR, PORT OF OAKLAND, REPRESENTING THE AMERICAN ASSOCIATION OF PORT AUTHORITIES

Mr. ROBERTS. Mr. Chairman and Members of the Subcommittee, my name is Charley Roberts, and I am the Executive Director of the Port of Oakland.

I really appreciate the opportunity to appear before you today and to discuss our dredging crisis and its effect on our intermodal systems in United States ports.

In addition to being the Executive Director of the Port of Oakland, I appear as a member of the American Association of Port Authorities, and I am also the co-chairman of a dredging coalition that has been formed inside of AAPA along with Lillian Liburdi, the Executive Director of the Port of New York-New Jersey.

The dredging caucus was formed specifically about a year ago because of this crisis and to try to bring along legislation and regulatory reforms that we need to solve the problem.

Mr. Chairman, in recent years the Federal Government and the ports have found it more and more difficult to dispose of dredge material. As a result, the Corps and the ports have spent years in trying to solve various maintenance problems. It has had an effect on every coast.

The Ports of New York, Boston, Baltimore, Savannah, the Port of Miami River on the East Coast, Los Angeles, Long Beach, Oakland, Tacoma, Seattle on the West Coast, New Orleans, Houston on the Gulf, the Great Lakes, all have experienced major problems in dredging.

The dredging caucus has 40 ports as members because of this problem. The problem today in dredging is disposal. To dredge, you have to dispose and the problem is where to put the dredge material. Too often the frequently distorted environmental consequences of dredging have more effect on being able to dredge than the impact on trade and employment in a local area, and that is the real problem.

Dredging isn't simply the removing of silt and sand. It is an economic benefit that has to be done in order to keep our Nation moving and carry out what President Clinton's Administration and the Congress is trying to do to create more jobs.

Sadly, this is not happening in many ports. I hold here a stack of editorials and newspaper articles which, Mr. Chairman, I would like to submit to the Committee.

Mr. LIPINSKI. Without objection, so ordered.

[The material was not printed here due to volume.]

Mr. ROBERTS. Some of the headlines say, "Channel Access Problems in Boston Delays Boxship"; "Missed Call Spurs Demand to Speed Boston Dredging"; "Port of Providence is in Trouble"; "Dredging Delayed Primarily in Richmond, Virginia," et cetera. You can see the thickness. This is just in recent months or so of editorials. So the problem is being recognized by the public.

Let me give you an example of the economic impact of a lack of dredging. On the West Coast we have been able to dredge in some ports, but, as you know, in the Port of Oakland, we have spent 22 years trying to do it. We have gone from in 1980 a 28 percent share of the West Coast market at the Port of Oakland down to 17 percent.

If you take the difference between that share that we have lost because of lack of dredging, we estimate that there are approximately 4,500 jobs lost and about $150 million. If you consider—that is direct jobs.

If you consider the indirect jobs, we think the effect of just that drop from 28 percent to 17 percent has brought us, would have been another 6,500 jobs and $.5 billion, then you can relate the impact on the Hewlett-Packard technician who has to wait for shipping that is delayed. The NUMMI plant, that is a just in time operation.

Those affect, there are economic and employment effects right in the bay area. The good news is that two years ago we were able to dredge to 38 foot. It took 20 years to get there, and it took a effort of both Congress, all the leaders of labor and industry, and it even took the President of the United States saying get on with it.

But we got on with it, and we got that down to 38 foot and are now on schedule to start dredging to 42 foot December of this year. But the President can't do that on every project.

That is really what I am here to say. The bad news is that again we have experienced these delays and continue to do so. We have a problem where 90 percent of the major ports in the United States have to dredge. They handle 93 percent of the waterborne commerce, and they are all suffering or the majority are suffering from the problem with dredging.

Now, one of the issues is, and you discussed it in the last panel, is the Corps of Engineers in the Water Act of 1986 established a cost sharing provision, and that was 75/25. That system has worked fairly well.

The problem with it is for—it doesn't cover all the alternate dredge disposal alternatives. It covers open water disposal.

If you get into a confined or upland disposal requirement, the Corps says that is 100 percent the responsibility of the ports doing the dredging.

Also today the Corps of Engineers is responsible for 100 percent of the maintenance dredging, which was also discussed with the last panel. The problem here again is WRDA doesn't say anything about who pays for upland. That is really the problem. Again the Corps may specifically say that they don't have the authority to do that.

Let me move to the national dredging policy that has been created by the caucus, and say that I would like to submit, Mr. Chairman, a summary of that national dredging policy to the Subcommittee.

Mr. LIPINSKI. Without objection, so ordered.

[The information may be found at end of hearing.]

Mr. ROBERTS. Then I would like to mention two actions in that that we feel very strongly should be done. The first is the amendment to the Clean Water Act which would create a new section, such as 406, that would handle all dredging. That would create three new categories for dredging and put time lines. That is the Menendez Amendment, and we support that and think it is a very important step.

Mr. LIPINSKI. Has he or have you or any member of your group discussed this amendment with Chairman Mineta of the Public Works and Transportation Committee?

Mr. ROBERTS. Yes. I have sent him a letter and their staff is working on it.

Mr. LIPINSKI. Did he give you any response to this amendment?

Mr. ROBERTS. The problem is when the Clean Water Act is going to come up. He has accepted it and we are working with the staff, and we think it is acceptable to him, but we haven't been told that.

Mr. LIPINSKI. Was it in his committee print; do you know?

Mr. ROBERTS. It was not. It is in amendment form by the legislative counsel which Congressman Menendez asked for and has. We would like an amendment to the next bill saying in effect that the 25/75 sharing by the Corps on projects is for all disposal options in water, confined water, and upland, 100 percent by the Federal Government to maintain channels, therefore the upland should be 100 percent to maintain channels.

The Corps has to use all options and we would like that put into the next water resources act. We are working on legislation to prepare that amendment at the present time, and will be glad to bring it to you when we get it ready.

I really appreciate this. Over the last 20 years, I have been working on this problem and due to the sweat and tears and agony, it has been difficult, but I feel very optimistic mainly because of this Subcommittee meeting on this subject and bringing it to everybody's attention so that we can go on from here.

[The statement of Charles Roberts may be found at end of hearing.]

Mr. LIPINSKI. Thank you.

Mr. John Loftus?

STATEMENT OF JOHN F. LOFTUS, SEAPORT DIRECTOR, TOLEDO-LUCAS COUNTY PORT AUTHORITY, REPRESENTING THE AMERICAN GREAT LAKES PORTS

Mr. LOFTUS. Thank you, Mr. Chairman.

I am John M. Loftus. I am the Seaport Director of the Toledo-Lucas County Port Authority. I represent not only the port interest, but on behalf of Mr. Ken Szallai, the Port Director of Milwaukee, I represent the American Association of American Great Lake Ports and their various interests.

Prior to taking on my position at the Port of Toledo, I had the pleasure of working for Senator John Glenn on the dredging issues and helped put together the formula on the cost sharing that was incorporated in WRDA 1986. So I have only had 12 years of experience on this. I guess I have a few more to go to catch up with Charley.

In terms of the Great Lakes issues, there are basically two things that we have to deal with. Dredging is a matter of survival on the Great Lakes. We heard Mr. Menendez talk earlier about the situation in New York-New Jersey where some boats are talking about lightering cargoes so then they can move into their berth.

On the Great Lakes, we don't have that option. If a vessel cannot move in at 26 feet of draft, they are not going to come into our ports. If somebody can't come into Toledo at 26, they are going to go to Sandusky. If they can't go into Chicago at 26 feet, they are going to go to Milwaukee or Burns Harbor. If we don't dredge our connecting channels to required depths, they will not come into the system at all. They will go to Montreal or Halifax or an East Coast port.

So we are talking about pure survival of our system when talking about dredging.

The second component is cost. The WRDA 1986 established cost-sharing formulas. Those costs added to the competitive problems of moving cargoes especially through the Great Lakes. We are limited in draft. It makes it much more difficult to attract shippers to use the Great Lakes.

So we have to maintain a very competitive posture. A few cents a bushel can make the difference between whether a cargo is sold out of the United States or through Argentina, or Canada or South Africa. So you have to be very concerned about the amount of cost sharing that you are imposing on our ports to do the dredging.

It is important to point out, as I mentioned, the fact that we are locked in at 26 feet. We don't have the option of looking at going deeper.

Charley is fortunate; he was able to go to 38 feet, and now talking about now going to 42 feet. That is not a option for consideration on the Great Lakes. We are stuck at 26 feet because of the draft limitations on the Welling canal. There are draft limitations placed on the locks in Sioux St. Marie, Michigan. So we don't have the option of going deeper to try to make ourselves more competitive, and that gets to the issue of cost sharing once again.

We keep talking about going in and who is going to pay how much for what project. Cost sharing established in WRDA 86, the idea was if you are going to do a new project for new business or new opportunities which could generate additional revenues, then you could start talking about the cost-sharing issue.

We are talking about strictly maintenance dredging here. You can't add new cost for confined disposal facilities; you are going to run us out of business.

There are two impacts that you are going to see. There is an employment impact and an environmental component. The Great Lakes, unlike most of our coastal partners, are very involved with intra-lake movements, coastwise trade, Jones Act trade, serving the steel industry, the automotive and agricultural industry.

These cargoes have to move, or we would prefer them moving by water. If through the actions of the Federal Government, either by adding cost or not doing proper dredging, if you force this stuff off the water on to rail or truck, there is going to be an environmental impact of that.

A study completed by the Great Lakes Commission took 11 scenarios, taconite movements from Duluth, Minnesota to Lorraine, Ohio was an example. If you move that taconite off the water and put it on rail, you are going to almost double the amount of fuel consumed. You are going to nearly double the amount of emissions added to the atmosphere which eventually works its way into the lakes. So you are going to have an environmental impact.

Another example, and this was very serious because it demonstrated our big concern about the competitiveness of adding cost; in Incan-Superior moving between Thunder Bay, Ontario and Superior, Wisconsin, because of the costs associated with WRDA 86, when you also increased those costs by, I think, 300 percent, that service, that rail ferry service was no longer competitive. They shut it down.

It is now operating off the west coast of Canada, where there aren't cost-sharing provisions and now that material is moving by rail, adding more fuel consumption and more emissions into the atmosphere.

Let me give you some of the solutions that I think we have to deal with. I have been dealing with these issues out of Toledo for the last nine years and one of the things that comes up is there has to be a clarification of rules. That is a function of this Committee and Congress as well as the bureaucracy.

The bureaucracy tries to interpret what you are doing and they do not always do it properly. That is a problem that we have. I point to the example of the controversy between 401 regulations included in the Clean Water Act as opposed to the 404 regulations.

We need an ombudsman, a final arbiter. When we have disputes between agencies, we have to have somebody to go to who is going to make a final decision. Nobody wants to make a decision. They put our ports in jeopardy.

Third, we have got to recognize who is putting the contaminants there. The ports aren't the ones putting contaminants in there, yet we are being faced with the responsibility for cleaning it up.

We have to look for a more efficient way of doing this. It is time to reconsider—maybe there is a better way for the Corps to do it or maybe there is a different agency that can do it. Maybe the FAA formula would be a better way to do it where the money is doled out to the project on a grant basis and the locals are responsible for doing it.

Maybe we could do it cheaper, because that is what it all comes down to, the dollars that go into this project.

Thank you for the opportunity to testify today.

Mr. LIPINSKI. Thank you.

[The statement of Mr. Loftus may be found at end of hearing.]

Mr. LIPINSKI. Our next speaker will be Mr. John Bowers, Sr.

STATEMENT OF JOHN BOWERS, SR., PRESIDENT, INTERNATIONAL LONGSHOREMAN'S ASSOCIATION

Mr. BOWERS. Mr. Chairman and Members of the Subcommittee, my name is John Bowers. I am the President of the International Longshoreman's Association, also known as the ILA. I thank the Members of the Subcommittee for inviting me to speak on behalf of the hundred thousand members that I represent and their families and their livelihoods which are at stake.

As my prepared statement to the Subcommittee shows, the issue of dredging has reached a critical stage. I am offering this prepared statement into the record.

Mr. LIPINSKI. Without objection, so ordered.

Anybody else that had more extensive statements than they have given us orally will be accepted into the record, without objection.

Mr. BOWERS. The consequences of not moving forward will have far-reaching implications for our members and even beyond those which are addressed in my statement. At a time when Congress and the Nation are focusing on the problem of providing health care benefits, I wish to point out that the health and welfare plans as well as pension plans covering our members are being jeopardized.

Those plans are funded by manhours of container assessments which in turn are endangered by the inability of containers and other cargoes to reach and be handled by our members.

I also wish to stress that Longshoremen and their families are environmentalists. Like any other family, our members want clean air, clean water, and a clean environment for their children and their children's children.

In the Port of New York, for example, we have a passenger terminal, a $40 million passenger terminal. For the last 2 years, the passenger ship people, have had to put a schedule in place a year in advance. They had received notice within two weeks of closing the passenger ship terminal down because we can't get the permits. Fortunately, they were granted. However, something better has to be done.

I am also the vice chairman of the dockers section of the International Transport Federation. We (the ITF) don't have these dredging problems. Canada, everybody, they just keep getting our work. Something better has to be done.

The ILA seeks to join with environmentalists in reaching accommodations that will satisfy all of our various concerns. However, I am confident that the Members of this Subcommittee will agree that while working out a resolution, we cannot shut down our multi-million dollar industry while making our piers inaccessible. We need a clear, lucid, reasonable and effective national policy on dredging that has the backing of Congress and to which it gives unmistakable direction and expediency.

[The statement of Mr. Bowers may be found at end of hearing.]

Mr. LIPINSKI. Our next speaker will be Gene Pentimonti, Vice President, Military Affairs, American President Companies.

STATEMENT OF GENE PENTIMONTI, VICE PRESIDENT, GOVERNMENT SERVICES, AMERICAN PRESIDENT LINES, AND VICE PRESIDENT, MILITARY AFFAIRS, AMERICAN PRESIDENT COMPANIES

Mr. PENTIMONTI. Good morning Mr. Chairman and Members of the Committee. My name is Gene Pentimonti. I am Vice President of Government Services for American President Lines. As you know, American President Lines is the fourth largest liner carrier in the world by volume.

We currently operate mostly in the Pacific Rim and the Middle East and our fleet consists of 19 state-of-the-art large container ships and a similar number of smaller feeder ships.

I applaud you for holding this hearing today and appreciate the opportunity to appear before your Subcommittee to discuss an issue that has captured the attention and the consternation of the entire maritime community: dredging, or perhaps I should say, lack of dredging.

Let me state that while I am here representing APL and its parent, American President Companies, I would like to note that a large group of my colleagues and carriers, both foreign and U.S.-flag, are here and concerned and have endorsed my statement.

I would like to submit for the record, with your earlier permission, a list of those carriers who are supporting this statement.

Mr. Chairman, I know you realize the extent to which ocean container industry, particularly the container cargo segment, has undergone tremendous change and growth over the past 30 years. The cargo capacity of our container ships has grown from initially in 1970 about 1,000 containers per ship to now where we are building large state-of-the-art ships that carryover 5,000 containers per ship.

Therefore, there has been a corresponding increase in the dimensions of the ships, the length, the beam and the depth. In today's competitive environment, these ships are being built to replace the smaller ones, which had smaller and lower draft dimensions.

There are basically two classes of ships that we operate. One is called Panamax, meaning that the vessel is small enough to get through the Panama Canal, but for that vessel to compete, because of its narrow beam, it must carry about 25 percent of its dead weight in ballast to keep the stability of the vessel up, in which case these vessels operate at a relatively deep draft.

The other class of ships which we are building now is referred as post-Panamax or non-Panamax and these vessels exceed the dimensions of the Panama Canal. These are upwards of 5,000 containers per vessel. The maximum drafts of these vessels is pushing 42 feet and beyond, in which case the channels and harbors and infrastructure must be accommodated so that these vessels can operate.

The problems that I am talking about speak particularly to the ones which we have seen in the port of Oakland.

American President Lines operate at the Middle Harbor Terminal in the Port of Oakland. You have just heard from Charley Roberts, with whom I have expended a good deal of time over the years to get that port dredged to accommodate these ships.

The 38-foot depth that he indicated was improving the channel depth of 35 feet. This project was ultimately completed in 1992, but only after a cumbersome process which caused a great deal of heartache and time delays and economic losses, not only to ourselves, but to the port and to the entire San Francisco Bay community.

In the late 1980's, APL began deploying these new C–10 class vessels which called the Port of Oakland. The C–10's feature, the wide-body design makes us more competitive.

As carriers strive to provide a higher level of service for their customers, these types of large ships have become the industry standard.

Further, U.S. flag carriers have added the dimension of service in contracting with the U.S. military. Increasingly the U.S. military has also moved toward containerization for its logistics requirement. Here, too, large, cost effective modern tonnage is a key to meeting these military requirements.

Yet until the channel deepening project two years ago, the Oakland channel severely limited the operation of our C–10 class vessels because of the vessel's deeper draft. We suffered many economic penalties for calling the Port of Oakland.

Typically these ships had to wait for high tides in order to enter or leave the port. When attempting to depart, we had to hire additional workers to speed the loading of the vessel in order to catch the next tide. Further, the ships were not loaded with cargo. Even at the high tides, channel depths would not accommodate the drafts of the vessel class, and therefore we had to leave cargo behind.

And let me remind you that high tide, while always approximately 12 hours apart, is never at the same time of the day and varies in detail and height depending on the day of the year, weather conditions, and the lunar cycle.

As a high-level intermodal operator, let me assure you we can't operate the system that we have designed on the schedule of the moon!

Here was our typical capacity constraint in the years prior to the 38-foot dredging project. A C–10 has a capacity of approximately 1,900 forty-foot equivalents or almost 4,000 twenty-foot equivalents. At low tide, we had to account for a draft of 33 feet only.

The capacity for one of our ships at this draft is only about 1,200 forty foot equivalents or roughly 35 percent less than the vessel capacity. On a high tide, we can operate at 37 feet, which means approximately 1,600 FEU capacity or nearly 20 percent of a loss of capacity, still well below the full capacity and obviously better than without the tide. However we have calculated that we lose over 109 containers on each vessel for every foot that we can't dredge the harbor.

We also estimated that in the year prior to the 38-foot project, we lost almost one complete shipload of traffic because of the dredging restriction.

An important point to bear in mind is that even with the current 38-foot channel depth, there is still a continued problem for APL, and to a lesser degree with many other carriers that we compete with in Oakland. For that reason we are anxiously awaiting the start of the next Oakland deepening project, which will take the channel down to 42 feet.

Mr. Chairman as you and Members of this Subcommittee well know, the liner operators are today primarily responsible for carrying a majority of the cargo in and out of this country. Nearly all of the liner cargo is containerized.

Back in the days when break bulk cargo was the norm, ships might stay in a port for three or four days, sometimes more than a week. Today large C–10's can be fully loaded in approximately 20 hours. With today's cost of building modern container ships at the range of $80 million and the tightly integrated intermodal connections that we need to make with this cargo ship, owners must take advantage of every revenue opportunity which means quick turnarounds both in and out of a port.

So the real cost to a carrier of not having sufficient channel depth is the inability to efficiently call or depart a port with respect to both the loss of tonnage and the operating costs associated with waiting for a high tide, including increased crew and fuel expenses for faster operations.

We are not the only operator who is losing money; and I would like to say that our costs of operating in Oakland are over $10 million a year for ourselves based only on the dredging problems. These costs are passed on ultimately to customers; but there is a greater cost, the cost to our country's competitiveness.

Nowhere else in the world do we see such a protracted and slow process in getting channels dredged as we do in the United States. No other industrialized port country would allow their infrastructure to suffer in the manner we have.

In no other country in which we operate these large new state-of-the-art ships are channel depths unable to take them. I understand the real need to adhere to environmental laws and regulations and no one here today is suggesting that we shouldn't. But within the scope of these environmental laws, we must find ways to dredge our Nation's ports in a timely and cost-effective manner.

Finally I would like to echo what Charlie Roberts said earlier, and that is that the dredging problem goes beyond whether there is sufficient channel depth to handle the traffic. It is also in maintaining the channels and keeping them at the authorized depths that is an important element.

I would like to close by saying that it is a national problem, one which affects the competitiveness of this country. Not only do we lose traffic by not being able to operate at proper depths in our ports, but that which we do operate, we operate in a more inefficient way; and that cost is passed on to the consumer for sure.

Thank you for the opportunity to appear before you today and commend the Subcommittee for its focus on this subject.

Thank you very much.

Mr. LIPINSKI. Thank you very much for your testimony.

[The statement of Gene Pentimonti may be found at end of hearing.]

STATEMENT OF JACK L. FIELDS, ASSISTANT VICE PRESIDENT, INTERNATIONAL SALES AND SERVICE, ATCHISON, TOPEKA & SANTA FE RAILWAY COMPANY

Mr. LIPINSKI. Our next witness will be Mr. Jack L. Fields.

Mr. JACK L. FIELDS. Thank you, Mr. Chairman. Members of the Subcommittee, my name is Jack L. Fields. I am Assistant Vice President, International Sales and Service for the Atchison, Topeka and Santa Fe Railway Company.

I would like to give credit to my predecessors in their testimony because they have done a very excellent job in framing the intricacy and the linkage between different modes of transportation and the concepts that are involved with the progress and the growth of American industry and also in the provision of jobs for this country.

I think there is some deviation from my submission in the testimony that I will give you at this time, but by doing so, I think I can better frame some other elements involved in the transportation cycle that are important to the industry and to America in general.

Today's intermodal is the fastest growing segment in the railroad industry, second only to coal as a source of business. In 1993 railroads moved over 7 million trailers and containers that otherwise would have increased highway congestion and contributed to accidents.

An especially efficient intermodal technology, one which is commonplace in the handling of intermodal freight is the double stacking of containers on railroad flat cars. One stacked train is capable of transporting 280 or even more containers, which consists of only two crew members.

Double-stack trains allow capacity to be increased without a corresponding increase in overall train length.

The purpose of this testimony is to outline Santa Fe's involvement with the ports that we serve and to stress the need for adequate capacity at the ports and the ability of the railroads to move international freight. Santa Fe serves seven western, midwestern and southwestern States over high-speed, high-capacity routes between Chicago, the West coast and the Gulf ports.

During the next five years our company plans to spend almost $1 billion in capital money to improve our infrastructure and maintain our system to accommodate the growth that we see in both domestic and international freight.

This does not include capital money that was spent this year to expand the mountain tunnels to give the Port of Oakland capacity for double-high cube stack service to and from the West coast. Santa Fe is a major actor in the movement of intermodal freight. In 1983 we handled over 365,000 international containers which made up better than 30 percent of our overall intermodal business.

Santa Fe has experienced a tremendous growth rate in international freight over the last two years. We have had between 14 and 15 percent increases in international freight in both those calendar years. The ports generally on the West Coast are projecting about a 5 percent compound annual growth rate over the next 5 to 10 years.

I would submit to you that with the rapid growth of the People's Republic of China, Southeast Asia, and even the Indian subcontinent those estimates may well be very low. Manufacturing production in Asia is shifting from the northeast to the southeast of Asia, and the People's Republic of China Gross Domestic Product is growing at a double digit ratio.

The Most Favored Nations policy recently issued by the Clinton Administration clearly facilitates continued extraordinary growth in production as well as consumption by mainland China. Mainland China represents 1.2 billion people.

Chinese import opportunities have been greatly enhanced and therefore the long-term export opportunities inherent to improving the wealth of the Chinese people are likewise enhanced.

I recently took a trip to several Asian countries and on that trip we called on steamship companies, we called on manufacturing companies, and we also called on the Chinese Ministry of Railways. There was an universal interest throughout Asia in what the ports and the railroads are doing within this country to improve their infrastructure and accommodate the growth that is anticipated over the next decade or two.

Specific areas of interest were the Port of Oakland dredging project and the proposed joint intermodal terminal as well as south coast initiatives. The Asian shipping companies and manufacturers alike are quite concerned about inland transportation and capital expansion projects associated with capacity improvements.

The question is will the ports and the railroads be able to handle their freight. Among other concerns was our experience with the 1993 midwest floods and a trucking industry strike sustained last November, both of which severely hampered U.S. port throughput.

The completion of dredging projects such as the 42-foot program at the Port of Oakland is essential to international transportation. Ocean carriers have already announced the coming of larger, deeper draft vessels. Vessel slot capacity will increase significantly worldwide over the next few years.

For the most part, these new ships are post-Panamax, implying that their capacity will be used for inland U.S. transport. Likewise the proposed Port of Oakland joint intermodal terminal represents an infrastructure project necessary to satisfy the demand for increased efficiencies that is being placed upon the entire international transportation network.

Additionally competitive rail access is imperative at all major ports in order to provide optimum utilization of existing rail infrastructures and routing options. The throughput capacities of the ports and the supporting railroad infrastructures are essential elements in facilitating world economic growth because of the critical role that the international transportation system plays in the global economy.

The importance of port capacity is well recognized in Asian communities, particularly in Singapore, where plans are under way to triple throughput potential from the present 10 million, 20-foot equivalent units to a planned 30 million TEU.

From a global perspective, this is particularly significant due to Singapore's geographically strategic location at a crossroads point for international freight aggregation and transfer.

Santa Fe's primary route structure extends the length of California from the Bay area to Los Angeles, inland to Kansas City, St. Louis, and Chicago. Chicago represents by far the largest transportation hub and distribution point for American railroads. The cooperation between eastern and western railroads in the interchanging of international and other fright through Chicago as a hub is exceptional.

With international intermodal traffic volumes on the railroad skyrocketing, the ability of the railroads to continue the efficient throughput of this freight through Chicago is of major importance.

In this testimony, I have attempted to outline the importance of our company's relationship with the ports and the efficient handling of intermodal freight, and to identify capacity improvements that have been undertaken by Santa Fe and the ports to improve efficiency of the international transportation system in light of the increasing demands being placed on that system.

In closing, I want to reemphasize the importance of adequate dredging at the ports. Without such dredging, no matter what other efficiency gains are accomplished by the railroads and ports, the transportation system will simply not be able to handle projected volumes of international freight, especially as the new higher capacity vessels come on line.

Thank you for the opportunity to present this testimony.

Mr. LIPINSKI. Thank you Mr. Fields.

[The statement of Jack L. Fields may be found at end of hearing.]

STATEMENT OF JAMES A. CAPO, PRESIDENT, NEW YORK SHIPPING ASSOCIATION, INC.

Mr. LIPINSKI. Our next witness will be Mr. James A. Capo, President, New York Shipping Association, Inc.

Mr. CAPO. Good morning Mr. Chairman and Members of the Committee. I am James Capo, President of the New York Shipping Association.

We represent 75 maritime employers who do business in the Port of New York and New Jersey and it is those employers who employ several thousand members that Mr. Bowers represents.

Thank you for the opportunity to be here today. I am truly gratified that you are concerned about the dredging crisis. Make no mistake, this is a crisis. Our ports in this country are under attack by their own Federal Government and unless they get help now, and I am not talking about more study or more lip service but genuine help, both our ports and the American economy will continue to suffer.

To date the issue has been handled in two ways, as an environmental Armageddon or as an obscure academic concern. The result in the Port of New York and New Jersey is that over the last several years, we have had delays on some very critical dredging either having been stopped or drastically delayed while a number of different government agencies have debated the issue.

Well, I think I can safely say that dredging is neither Armageddon nor academic. It is a fundamental requirement for preserving America's place in the global economy. I am sorry to say this requirement is not being met. It seems somewhat incredible that approximately 218 years after this country was founded, the American Government does not seem to realize that our seaports are vital both to our trade and our national defense.

Mr. Chairman, I know that you know we are surrounded by an ocean on both sides and that airplanes are too costly to transport cargo. Ocean transport has been and will continue to remain the most effective means of transporting goods in and out of America that are vital to our economy, and we can't have effective ocean transport without seaports.

So seaports are the key connections in the intermodal pipeline of transportation. They couple the ocean mode of transport with the land modes of transport. Without ports, there is no connection and the whole intermodal system breaks down.

In the Port of New York and New Jersey, we generate about $20 billion a year in economic activity. About $400 million of that is taxes. We have a responsibility for 180,000 jobs, and those jobs and the people who hold those jobs support other industries like the New Jersey tourism industry for example.

If I might get personal, Mr. Bowers talked about his concern over the welfare and pension plans. In the Port of New York and New Jersey, we have about 20,000 pension checks generated every month for retirees and their families. We have a health care system that serves over 40,000 people, a health care system that is paid for entirely by the companies who operate.

The millions and millions of dollars to fund those programs in our port is generated by tonnage assessments paid by the carriers who operate there, and when those carriers go to other ports because they can't get into New York, the tonnage assessment and the revenues generated go with them.

So our livelihood, our survival depends on being able to dredge properly and regularly. The natural depth of our harbors is 18 feet, which is about half of what is needed to accommodate modern ships. Dredging is not new. We have had to dredge for many years, and since 1914 we have disposed of our dredge material at an ocean site called the Mud Dump.

Eighty years of dredge material haven't ruined the site. In fact, the Mud Dump is considered one of the premier fishing grounds off New Jersey.

But if we cannot continue to dredge properly and regularly, our ports silt up and become increasingly unable to handle shipping. I will be repetitive, because if that is the case, we endanger 180,000 jobs and $20 billion in annual economic activity. It makes trade and economic development more costly and less competitive, and it threatens other industries by taking jobs away from its primary customer base.

But it actually threatens the environment, the same environment that we are working so hard to preserve, because it certainly does increase the risk of ship collisions and oil spills and it adds to air pollution, consumer costs, and energy consumption because goods that now move through our port will have to be trucked in from another.

In the New York-New Jersey metropolitan area, we have about 18 million people living there, and if we can't bring goods through the Port of New York, they will come from somewhere else.

I shudder to think of the additional strain on the infrastructure if you are talking about an additional 1 million truck trips per year through the region's highways. You will hear calls for long-term alternatives on this issue.

We are not against those. We actively support them. We have supported the legislation Charley Roberts talked about; we support the legislation of Congressman Menendez. We have been involved with the interagency task force and with a number of dredging forums in the New York-New Jersey area. Most of all, we support the environment.

But you have to understand that we have a short-term problem here that requires short-term action and solution. If we don't do that, then we won't have a long-term problem and we won't need a long-term solution because certainly in our port, we won't be around.

The problem will have gone elsewhere. So it is critical to keep that in mind. We can't shut the ports down for three, four, ten years, or however long it takes to find and implement alternatives. Our region and our country will lose.

And this is not idle talk. Shipping is a highly competitive business and as this debate rages in New York and New Jersey, I am sorry to say that I have members of my association, steamship lines who are up in the Port of Halifax talking about intermodal opportunities there.

One of the reasons they are there, quite frankly, is they have a great concern for the future that New York-New Jersey will not be able to provide sufficient water depth to handle their ships.

With your permission, I would like to submit a couple of articles which talk about Halifax.

Mr. LIPINSKI. Without objection so ordered.

[The articles may be found at end of hearing.]

Mr. LIPINSKI. I would like, as long as I have my mike open, to mention that we have a vote on, so I would like you to accelerate your testimony so we can get the last gentleman in before we go to vote.

Mr. CAPO. Halifax already has a deep harbor and the same government that won't allow us to dredge has recently granted its blessing to a new rail tunnel that will give Halifax a new superhighway into the American Midwest.

They are very excited in Halifax, and I don't blame them. I wonder why we are helping them take our own business while we debate this issue. I appreciate the opportunity to be here.

Thank you very much.

[The statement of James Capo may be found at end of hearing.]

STATEMENT OF MARK SICKLES, EXECUTIVE DIRECTOR, DREDGING CONTRACTORS OF AMERICA

Mr. LIPINSKI. Our last speaker will be Mark Sickles, Executive Director, Dredging Contractors of America. I also ask you to be— I know you are last, but be brief.

Mr. SICKLES. Mr. Chairman, we are used to this position. Thank you. As you said, I am Mark Sickles, Executive Director of the Dredging Contractors of America.

This association was founded last year in a merger of the small business dredging association and my former employer, the National Association of Dredging Contractors. We perform approximately 80 percent of the Corps of Engineers contract dredging and 100 percent of the private hopper dredge work load.

We strongly endorse AAPA's call for a national dredging policy. At the root of the regulatory gridlock, what we face is a divided Federal family. A formal acknowledgment of the importance of our ports to the national economy at the highest level is a fundamental starting point in beginning to break this gridlock, and we would like to commend the administration for at least starting to take this problem on, and would urge the Committee to keep the pressure on the administration to produce results.

Like my testimony on this panel, we come at the tail end of the regulatory and project formulation process. From our perspective, the future is not bright. The endless studies, analyses, the lack of a definitive, rational decisionmaking process is contributing to the slow destruction of our industry.

Our business is very capital intensive. Last year the third largest company in the Nation was forced out of business. Three years ago, the second largest company on the West Coast met a similar fate. Unemployment within the ranks of our highly skilled and uniquely trained work force is unacceptable.

In addition to the regulatory gridlock unnecessarily devastating our industry, the government operates a fleet of expensive, noncommercial dredges which, when operated full-time, consume an inordinate share of the smaller overall market.

This is particularly true in the seagoing hopper dredge segment where the government spends almost $50 million to operate just four ships. Hopper dredges are highly maneuverable, usually self-propelled ships which accomplish approximately 20 percent of all dredging by volume.

It is work that is typically performed at the outermost reach of Federal ship channels where sea conditions limit the effectiveness of other types of dredge plant and where, incidentally, sediment quality is not usually an issue.

Until fiscal 1993, these government hopper dredges consumed approximately 40 percent of the available work with only 20 percent of the total hopper dredge capacity. The other 80 percent, represented by our membership, must compete for the remaining volume.

Due largely to this imbalance, the largest hopper dredge in the U.S. flag fleet left the country for the Far East in 1991, and it will only return when market conditions improve substantially.

We are working with the Public Works and Appropriations committees to lessen the damage these government dredges do to us and we would greatly appreciate your help in this regard. It is an area ripe for saving scarce taxpayer dollars.

As we have already heard today, we need a better process for disposal site selection. Each regulatory agency is focused on one receiving media and they protect that to the detriment of others; therefore, agree with the Corps' emphasis on a multimedia approach to environmental analysis.

We support policy changes which would encourage construction of confined disposal facilities. By definition, however, these facilities require the filling of a bay or river bottom and, under current law, only the States can make this happen. They must provide leadership at the local level.

In order to start to attempt to improve the regulatory morass, new statutory authority to deal with this unique transportation problem is something that should be explored by Congress. For example, the Ocean Dumping Act and the Clean Water Act require different standards. The agencies have some authority now to make these regulations more uniform, but few measurable improvements have been achieved over the years. Regulatory personnel within the Corps of Engineers that are trained to regulate wetlands are the same people who are in charge of regulating and determining what to do with dredged material, and we think that is a fundamental problem.

Finally, the use of dredge material for beneficial purposes should be employed whenever possible. I think the Corps has done a better job in this than is widely recognized. The primary problem arises when the beneficial use is significantly more expensive than the traditional methodology, and there are no funds available.

I thank you for considering our views. I wish Mr. Pickett hadn't left because he asked about potential harm of dredging decisions that had been made over the years. A lot of our irreplaceable infrastructure is based on the dredging process. Every time he flies to Norfolk, he takes off on land that was built by dredgers and lands on land that was built by dredgers.

When your Chicago constituents go to the Lake Michigan waterfront, they picnic and relax on park grounds that were created by our industry. When they fly to La Guardia, Logan, Kennedy, San Francisco, Oakland, all these airports were built by our industry—we could never replace these national assets.

Thank you very much.

[The statement of Mark Sickles may be found at end of hearing.]

Mr. LIPINSKI. I need to vote. I appreciate all the witnesses this morning, particularly this last group here. I appreciate your testimony.

We certainly are interested in this matter, and you can rest assured that this Subcommittee is going to pursue it. Now, I have to go over and pursue voting.

Thank you very much.

[Whereupon, at 12:00 noon, the Subcommittee was adjourned; and the following was submitted for the record:]

Hampton Roads Maritime Association
INCORPORATED
228-236 E. PLUME STREET
P. O. BOX 3487
NORFOLK, VIRGINIA 23514-3487
PHONE (804) 622-2639
FAX (804) 622-6302

Recipient of the
Presidential "E" and "E Star"
Awards for Excellence
In Export Service

June 14, 1994

Mr. Carl Sobremisana
Outreach Coordinator
Maritime Administration
U.S. Department of Transportation
400-7th Street SW, Room 7201
Washington, DC 20590

Dear Mr. Sobremisana:

The Hampton Roads Maritime Association (HRMA) was founded in 1920 to promote, protect and encourage commercial shipping through the Port of Hampton Roads, Virginia. We currently have 600 members representing all types of businesses which are directly and indirectly engaged in waterborne commerce moving through the Port of Hampton Roads.

The Harbor-Anchorage Dredging Committee of HRMA which is comprised of dredging interests in the Port of Hampton Roads met recently to review and discuss the Options Paper dated May 1994 by the Interagency Working Group of the Dredging Process. The committee applauds the attempts of the Working Group to improve interagency coordination, information gathering, criteria review, and overall sequencing of approvals; and its attempts to facilitate long-term strategies for addressing dredging and disposal needs. Further, our committee recognizes and supports the excerpt from President Clinton's letter to the AAPA dated March 25, 1994: "Our nation's ports are a key link in the intermodal transportation chain and can only realize their full potential as magnets for shipping and commerce if our nation's harbors are dredged and open for trade."

While we support the general purpose of the Options Paper we offer the following comments specific to findings by the Working Group.

- The Harbor Maintenance Trust Fund (HMTF) was established to be used to fund the maintenance of the deep draft Federal channels and HRMA recommends that the HMTF remain as a source of funding for the construction and maintenance of dredging projects.

- Reduce the overlapping of Federal regulations.

- Continue to support the U.S. Army Corps of Engineers in their present mission

However, Hampton Roads Maritime Association takes exception to the following:

- Option 2.3 - *Establish Advisory Working Groups for Each Major Port Area to Participate in Dredged Material Management Planning.* The current review and permitting process make available the opportunities for participation in dredging projects.

- Option 3.2 - *Seek Alternatives to Open-Water Disposal for Contaminated Sediments.* Current sediment tests appear to provide sufficient levels of awareness of contaminated sediment.

- Option 3.5 - *Provide for More Effective Education and Communication with the Public on the Risks and Impacts Associated with Disposal of Dredged Material.* Current regulatory policies and procedures allow for adequate public comment and participation on any dredging projects.

- Option 5.1 - *Transfer the lead responsibility for project implementation from the Federal government to non-Federal sponsors and establish a dedicated source of funding for navigation projects which distributes Federal funds to navigation project sponsors as grants.* The current lead responsibility with the U.S. Army Corps of Engineers is more than sufficient and has a proven track record in effectiveness and objectivity which is efficient in the decision making process.

- Option 5.8 - *Use the Harbor Maintenance Trust Fund to Support Activities such as Regional Management Studies, Beneficial Uses of Dredged Materials, Confined Disposal Facilities, and Remediation and Disposal Technologies.* The HMTF should continue to be used as a primary source for the funding of construction and maintenance of dredging projects. Secondary or supplementary funds from the HMTF could be used for such items as construction of confined disposal facilities, beneficial use of dredged material, regional dredged material management studies remediation of contaminated sediments, and research of alternative disposal technologies. However, construction and maintenance of dredging projects must not be neglected in order to fund these other activities.

We appreciate the opportunity to make our comments and would be happy to discuss this matter further with you.

Sincerely yours,

WILLIAM S. HULL
Chairman
Harbor-Anchorage Dredging Committee

cc: Robert H. Merhige
J. Robert Bray
George C. Garris

STATEMENT OF THE HON. ROBERT MENENDEZ
BEFORE
THE SUBCOMMITTEE ON MERCHANT MARINE

When I was elected to Congress, I never thought about the depth of the meaning of infrastructure. As a former mayor, an assemblyman and a state senator, I thought of infrastructure as roads, bridges, airports and sewers. The precise definition of infrastructure is below the structure. We have all heard of the crisis in the American infrastructure but everyone thinks of huge, gaping potholes, crumbling bridges, broken water mains and bacterial infestation of tap water.

With the Port of New York and New Jersey, the infrastructure crisis is not only below the structure but below the water. How in the world did we let our port silt from 35 feet to 19 feet deep? How can we let one of the world's great ports become so decrepit that tankers cannot berth at terminals without risking breaching their hulls and have to be offloaded by barges at deep water anchorages? In my area, 180,000 jobs are threatened in the port of New York and New Jersey, as well as $20 billion in economic activity. It would be easy to dismiss this as a regional problem but it is not. Even the Sierra Club says 10 million jobs and $400 billion in economic activity in virtually every harbor in the nation are at risk.

President Clinton had to intervene at the port of Oakland where dredging permits had been delayed 22 years. A containership had to bypass the port of Boston recently because the undredged harbor is no longer deep enough to allow a vessel of this size to make the harbor passage safely at low tide. Last winter, the port of Richmond, Virginia forced ship lines to load fewer containers and reroute freight because of silt deposits. Port Canaveral, Florida has the same problem. The delay is due to bureaucratic inertia because there are problems with disposing of contaminated sediments.

The amounts of contamination in the harbor sediments are measured in parts per trillion. One part per trillion would equal one second in 31,690 years. One trillionth of a gram is one million times less than the threshold of dioxin toxicity. Studies have shown, most of us in this room have roughly the same level of contaminants as the sediments. Ironically, each day the contaminated silt is left uncontained, the pollution is more broadly spread. Tests results in 1993 have shown that dioxin concentrations in the areas to be dredged are significantly less than when originally sampled in 1990. This means that they have spread out. Can allowing dioxin to move freely be the best course of action for the environment?

The problem for any dredging project is not that there is a specific numerical standard which sets a limit but a highly touchy biological roll of the dice. The result is an ephemeral standard for the disposal of dredged materials in the ocean is stricter, in effect, than any other environmental standard. It is stricter than standards for drinking water, air, food, medicine or the cleanup of a Superfund site. The heart of the dredging problem is that the detection of contamination has become the standard. The law does not define "trace contaminants," neither do the agencies. Loose regulatory practices coupled with an interest in technology have resulted in a 50% increase in the cost of dredging with no demonstrated benefit for health or the environment.

Substantive legislative guidance is needed. I have introduced the Harbor Environmental Dredging and Management Act of 1993. This bill establishes a definitive time limit on the ocean disposal and relocation permit process. All federal agencies must make a decision on a permit within 165 days after receiving an application. Under current law there is no limit on the process. The Army Corps of Engineers is responsible for issuing the dredging permit, but the E.P.A. must decide where the material can be disposed. Environmental safety standards that are in effect on the date of the application filing must be applied throughout the process, unless there are immediate health or safety issues. Federal agencies must consider the effect that the failure to dredge will have on human health and welfare, including economic impact. The bill would allow contiguous applicants to apply for consortium permits to dredge and dispose of materials. This would cut down on the costs for small dredging applicants. My proposals for separating the process for issuing permits for commercial dredging projects from the controversy of the wetlands protection issues have slowing been gaining recognition. In a recent hearing of the Investigations and Oversight Subcommittee of the Committee on Public Works and Transportation, Chairman Norman Mineta joined me in pressing the EPA Deputy Administrator Bob Perciasepe for streamling and expediting permit issuance both in the New York Harbor and across the nation. This hearing was largely responsible for the issuance of the interim final rule which released seven permits from gridlock. Our permit process should not require Congressional oversight on a case by case basis. I have also been working with variations of these ideas with the American Association of Port Authorities along with Chairmen Norman Mineta and Gerry Studds, who have been very helpful in recognizing the need to streamline the dredging process.

We need to reach out nation wide and confront this unseen crisis in our nation's most heavily used commercial infrastructure. Ninety five percent of our nation's foreign commerce moves through our ports. It is not as if Massport or New York/New Jersey can silt up and the traffic can be moved to other American ports. The traffic can move through Canada and Mexico, who will eagerly dredge their ports to accommodate the traffic. All American ports are in this together. A few may have upland disposal for the short term but all will have a problem within the next ten to fifteen years.

We have made some remarkable progress in the last eighteen months. President Clinton has recognized the importance of maintenance dredging to protect our huge investment in ports. Secretary Pena's Interagency Task Force is trying to sort out the bureaucratic problems but there is a great deal more which needs to be done. The general membership of Congress is only distantly aware of the magnitude of this problem. The Congressmen from Iowa has to realize that his constituents' farm products can only move on ships from ports that need to be kept open and operating. In fact, many times the producers of the very products, which move through the ports, are the upstream cause of the very pollution which now fouls the ports.

The sources of the port pollution are generally not caused by the ports. Since most ports are at the terminal end of great watersheds, the pollution has washed down from over the entire countryside. Regardless, it is now in the sediments and the dredging laws require environmentally secure containment or decontamination. At the current rate of development, the option of decontamination of dredged material is not feasible for the next 10 to 20 years at the scales required for major ports. In fact, the volume of silt and the extremely small amount of contamination, measured in parts per trillion, underscores our current disparity between our technological ability to detect pollution and our ability to treat or decontaminate. By way of analogy, it is one thing measuring the distance to Mars within a millimeter, it is another thing getting there.

To accelerate making decontamination a reality, I succeeded in offering an amendment to the Department of Defense Authorization bill which establishes a plan called, Green Ports. This plan is a detailed roadmap laying out strategies to encourage the further development and deployment of existing defense environmental technologies in support of dual-use port dredging requirements for the identification, environmentally secure containment and decontamination of polluted dredged materials.

There are a wide variety of technologies that are already paid for and are under utilized. Examples of technologies that may be used are:

the cone penetronmeter using blue laser technology pioneered by the Navy to speed testing and location of pollutants both in ground water and in sediments;

a hydrogen reduction process which has successfully destroyed dioxin contamination at the port of Saginaw, Michigan;

clean coal technologies has shown very good promise for large scale pollution reduction with sediments. The point of the amendment is to promote full scale, working projects. The federal government has paid for the research on these technologies. My amendment will assist in the full scale deployment of these and other clean up techniques.

The longer we debate and search endlessly for "long term" solutions, the more cargo and jobs our ports lose to Halifax and Veracruz. Every national economy is heavily dependent on world trade. Our own nation has moved dramatically towards hemispheric, economic integration. Will we be able to answer the call to meet these new economic realities? If we work together there is no problem we cannot solve.

Our ports can lead to highways of opportunity, in a global market, or become roadblocks to economic prosperity. We can meet the environmental challenge, or by paralysis, permit the spreading of contamination in open waters. This has not been an easy issue - there is no organized constituency. The general public is unaware of the issue or the consequences. I salute the members of this Committee which have shown concern about this problem. Now we need action.

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
(CIVIL WORKS)

COMPLETE STATEMENT
OF
DR. MORGAN R. REES
DEPUTY ASSISTANT SECRETARY
PLANNING POLICY AND LEGISLATION

BEFORE THE SUBCOMMITTEE ON
MERCHANT MARINE

COMMITTEE ON MERCHANT MARINE AND FISHERIES
UNITED STATES HOUSE OF REPRESENTATIVES

ON

IMPACT OF DREDGING ON PORT COMPETITIVENESS

WASHINGTON, D.C.
JUNE 16, 1994

INTRODUCTION

Mr. Chairman and members of the subcommittee, I am Morgan R. Rees, Deputy Assistant Secretary, Planning Policy and Legislation, in the Office of the Assistant Secretary of the Army for Civil Works. Accompanying me today, also from the Assistant Secretary's Office, is Michael Davis, Assistant for Regulatory Affairs. We are pleased to appear today to provide information as requested in your letter of invitation to Acting Assistant Secretary Dr. John H. Zirschky. The Congressional interest in the Army's navigation mission as it relates to the nation's ports is very much appreciated.

We all recognize that the nation's ports are a vital link to domestic and international trade and to our nation's intermodal transportation system. Foreign trade now accounts for more than 20 percent of our Gross Domestic Product and is expected to make up an even greater share of our economy in the future. An essential element in our trade-dependent national economy is our nation's harbors, which must be dredged to remain open for trade. We also recognize that our nation's aquatic and other coastal resources are a critical asset which must be protected, conserved and restored. Balancing the need for viable ports and the need for environmental protection has become an increasingly difficult challenge. Factors contributing to the challenge are increasing concern with the environmental problems affecting coastal areas and ocean waters, heavy population shifts to coastal areas, the increasing need for navigation project improvements to meet the needs of world trade, and increasingly tight Federal, State and local budgets. As a result, dredging and dredged material disposal have become contentious problems encompassing all phases of harbor development and operation from planning new projects to maintaining existing ones.

In previous hearings on dredging and disposal of dredged material, we have heard from port and other maritime interests about the devastating economic impacts on port development, employment, and regional economies resulting from long delays in dredging operations. We concur with those statements and would add to the list of adverse effects the impact on Federal investments. In developing Federal dredging projects, the Corps of Engineers conducts thorough studies of the economic, environmental, and engineering feasibility of the proposals. Only after these studies are completed, projects are authorized through legislation with support from the Congress and the President. Significant Federal investments are then made constructing the channels. As part of this analysis, the Army calculates a benefit-to-cost ratio which compares the economic return of the Federal investment to the cost. Only environmentally sound projects with favorable B/C ratios receive Administration support. Of course, a project can generate a return only if it functions as intended. Whenever dredging is delayed, the return on the Federal investment is delayed. The longer the delay, the greater the loss of return potential.

Because the initial investment is sunk capital, the marginal return on maintenance dredging costs becomes an extremely valuable investment. We have studied the economic benefit of channel maintenance in several harbors considering the initial dredging as sunk costs and find that the marginal return on maintenance dredging ranges from about ten dollars to as high as twenty dollars to every dollar invested. One can see that delay in reaping these benefits can be very costly.

Do not misunderstand. We do not for a minute suggest any relaxation of environmental criteria governing the program. Rather, we see the potential anomaly in the Federal interest of making major investments on the one hand and failing to take advantage of the investments on the other. In our judgement, this clearly demonstrates the critical need to work together to find a solution and avoid delays. The economic benefits are not isolated to the port and maritime industry. They are distributed throughout the economy. Delays in dredging are not just problems for the Corps of Engineers or the ports. They are problems for the entire Administration, for the Congress and for the American taxpayer. We must broaden participation in finding solutions to the problems beyond the Corps of Engineers and the ports and the maritime interests. The environmental interests must help by becoming involved in the identification and analysis of options rather than simply reacting when options are proposed. The water quality agencies must increase their efforts to regulate discharges of pollutants, especially where the Corps and the ports later bear the burden of disposing of dredged material contaminated by those pollutants. It is important, too, that the polluters should share the burden of the cost of such disposal.

While the problems involving the disposal of dredged material are serious and difficult, we believe we are making substantial progress in solving them. President Clinton, in a recent letter to the American Association of Port Authorities, indicated that we can find a way to dredge our nation's ports without compromising environmental protection. We certainly share the President's views on this issue and are optimistic that both environmental protection and economic objectives can be attained. Recent Army/Environmental Protection Agency initiatives on improving the dredging process and the efforts of the Interagency Working Group on the Dredging Process emphasize the Administration's commitment on this issue.

After summarizing Army's responsibilities related to the dredging, our testimony today will concentrate on the importance of dredging and its relation to employment in the national transportation system, dredged material cost, Federal/local cost sharing issues, and Corps plans to more effectively keep the nation's ports open to trade.

ARMY RESPONSIBILITIES RELATED TO DREDGED MATERIAL DISPOSAL

The Army's two major activities directly involved in the management of dredged material are the national dredging program for constructing and maintaining the Federal portion of the nation's extensive navigation system of commercial channels, harbors and ports and the national regulatory program. While we have identified these two programs separately, they are closely interrelated and necessarily integrated.

Integrated into the requirements of the national dredging program and the Army's regulatory program for non-Federal dredging is responsibility for compliance with over 20 Federal environmental protection and conservation statutes. Some of these statutes are the Clean Water Act (CWA), the Marine Protection, Research and Sanctuaries Act (Ocean Dumping Act), the National Environmental Policy Act, the Endangered Species Act, the Coastal Zone Management Act, the National Marine Sanctuaries Program Amendments Act and the National Historic Preservation Act. In addition, implementation almost always requires approvals under various State programs and regulations. In executing the programs, we work closely with the EPA, the U.S. Fish and Wildlife Service and various elements of NOAA. The processes for implementing the programs are also designed to provide full involvement of State and local agencies and the public at large.

NATIONAL DREDGING PROGRAM

Activities under the national dredging program begin with a study of the economic, environmental, and engineering feasibility of potential harbor developments. If, based on the study, Congress and the President find that it is in the national interest to construct the harbor improvements, a project is authorized through legislation. This establishes the project as an integral and important part of the national economic and transportation infrastructure and that the project is consistent with national economic and environmental policies.

In carrying out this important program, the Corps of Engineers applies a rigorous analysis established under various statutes to ensure a quality environment along with economic development. The national program currently includes the construction of new or the improvement of existing projects, maintenance of over 200 deep draft coastal ports, over 600 shallow draft harbors, and nearly 11,000 miles of inland and intracoastal waterways.

NATIONAL DREDGING POLICY

Federal agencies have varying missions and mandates focused on both the need to develop the Nation's ports and harbors and the need to protect, conserve and restore aquatic and other coastal resources. There is some perception that these missions and mandates are in conflict. There is a need to establish a national policy on dredging for the development and management of the Nation's ports that will establish guiding principles to reconcile what are perceived as conflicting mandates. The Interagency Working Group on the Dredging Process which was formed by Secretary of Transportation Federico Peña in the fall of 1993 is providing an excellent forum to articulate a national dredging policy. The Group includes, in addition to the Maritime Administration representing the Department of Transportation, the Army, EPA, the Department of the Interior, and the Department of Commerce. The Working Group is expected to present its recommendations to Secretary Peña and the other department heads this summer.

ANTICIPATED DREDGED MATERIAL DISPOSAL NEEDS

Maintenance and improvement of ports and navigation channels are achieved primarily through dredging. The Army is responsible for dredging about 300 million cubic yards of material per year on average on coastal and inland harbors and channels. Of this total, one to four percent (3 to 12 million cubic yards) is considered contaminated to the extent it requires special handling. In addition to the Federal navigation dredging, the Army permits the non-Federal dredging of about 100 million cubic yards of dredged material across the nation each year. Many of the permitted activities are related to maintaining or improving the non-Federal elements of the commercial navigation system. While it is difficult to predict whether dredging needs over the next five to ten years will deviate significantly from the historic dredging rates and volumes, the Corps continues to plan for expected dredged material disposal volumes based on previous data.

Dredging and disposal of dredged material have been highly controversial for many years. The Corps, EPA and others have worked hard to resolve many of the contentious issues and have had some good successes. However, many issues remain. We believe most of the remaining issues can be resolved ultimately by the continued cooperative efforts of all interests. One of the most difficult issues in this regard is how to deal with the sources of pollution which ultimately finds its way into channel sediments. Neither the Corps of Engineers nor the applicants for permits to dredge the non-Federal portions of our ports and harbors have any responsibility for most of the pollution, yet they bear the burden of costly and contentious disposal of the resulting contaminated sediment. Other Federal and State agencies with authority and responsibility for pollution control must continue and enhance their activities to clean up our nation's waters, and the polluters must be held accountable for the pollution they cause.

To complicate matters, our technical capability to detect contaminants and assess the potential for contaminant-related impacts associated with dredged material disposal has improved drastically. Effective controls over point and non-point sources of pollution through existing Federal and State programs are essential, or the costs associated with dredged material disposal can be expected to rise due to greater amounts of dredged material requiring testing and increased special handling and disposal of dredged material, e.g., confined disposal facilities or capping in lieu of open water disposal.

REGULATORY PROGRAM

The Army administers its regulatory program through the Corps of Engineers. This responsibility includes authority to regulate: (1) dredging, the construction of structures, and other types of work in navigable waters of the United States (tidal waters and waters previously, currently, or potentially capable of providing for the transportation of interstate commerce) pursuant to section 10 of the Rivers and Harbors Act of 1899; (2) the discharge of dredged or fill material into waters of the United States (the territorial sea, all inland and near coastal waters located landward of the baseline of the territorial sea, wetlands adjacent to them, and isolated waters) pursuant to section 404 of the CWA; and, (3) the transportation of dredged material for the purpose of ocean dumping, seaward of the baseline of the territorial sea, pursuant to section 103 of the Ocean Dumping Act. The baseline of the territorial sea may generally be defined as the line on the shore reached by the ordinary low tides.

The Corps evaluation of a permit application proposing dredging and dredged material disposal activities involves determining whether the project complies with the Corps permit regulations and, for disposal in the oceans, the ocean dumping criteria, or, for disposal in inland and near coastal waters, the Section 404(b)(1) Guidelines.

To comply with its permit regulations, the Corps must conclude that the project is not contrary to the public interest. Public interest factors considered with respect to dredged material contaminant-related impacts include wetlands, water quality, water supply and conservation, safety, and fish and wildlife impacts, and economics.

To comply with the ocean dumping criteria, the Corps must determine that disposal of dredged material will not unreasonably degrade or endanger human health, welfare, amenities, or the marine environment, ecological systems or economic potentialities. When it is suspected that dredged material proposed for ocean disposal is contaminated, the Ocean Dumping Act requires testing, utilizing testing guidance provided in a manual entitled "Evaluation of Dredged Material Proposed for Ocean Disposal - Testing Manual", commonly known as the "Green Book." The Green Book utilizes biological testing, with chemical analysis as necessary, to provide effects-based conclusions, i.e., the potential for contaminant-related water column, benthic toxicity and benthic bioaccumulation impacts, within a tiered framework.

To comply with the Section 404(b)(1) Guidelines, the Corps must determine that disposal of dredged material at the proposed site is the least environmentally damaging, practicable alternative; complies with State and Federally established water quality and toxics standards; will not result in significant degradation of the aquatic environment, and, will be conducted and conditioned so as to minimize potential adverse impacts to the aquatic ecosystem. The Section 404(b)(1) Guidelines also require chemical and biological testing when there is reason to believe that material proposed for disposal in inland and near coastal waters is contaminated. In recognition of the need for greater consistency in testing procedures between inland and near coastal waters and the oceans, as well as between regions of the country, the Corps and EPA have formed a working group that is completing the draft of a manual entitled "Evaluation of Dredged Material For Discharge in Inland and Near Coastal Waters - Testing Manual", or "Inland Testing Manual". This manual is patterned after the Green Book. The Corps and EPA intend to publish the manual in the Federal Register for comment later this summer.

Additionally, any discharge of dredged material proposed for inland waters and near coastal waters and regulated by the Corps under the CWA must be certified by the appropriate State as complying with the applicable provisions of section 401 of the CWA. Most of the coastal States also administer coastal zone management programs under the Federal Coastal Zone Management Act. Federally regulated discharges of dredged material that may directly effect a Federally approved coastal zone must also be determined by the appropriate State to be consistent, to the maximum extent practicable, with that program prior to approval of the regulated activity.

The Corps regulatory process includes pre-application consultation to discuss the project and regulatory requirements with the intent of avoiding application evaluation delays. A public notice is prepared to describe the project and solicit comments from Federal, State and local agencies and groups and the public. The Corps may also conduct a public hearing if the Corps requires additional information to evaluate the proposed project. After information, including any letters, meetings, and coordination with the applicant and Federal, State and local agencies, is collected, the project is evaluated to render determinations regarding public interest and ocean dumping criteria compliance or Section 404(b)(1) Guidelines compliance. Testing of dredged material is conducted if the presence of contaminants is suspected, and the results are considered, in conjunction with other case-specific information, to effect decisions with regard to managing the dredged material. This may include alternative disposal sites, e.g., upland, inland and near coastal aquatic sites and the oceans, and alternative methods, e.g., capping or treatment of the dredged material. The Corps subsequently makes a decision to issue, issue with conditions, or deny the subject application; completes the required NEPA documentation, i.e., environmental assessment or environmental impact statement; and prepares statements of compliance with the Section 404(b)(1) Guidelines or the ocean dumping criteria and a statement of findings.

DREDGED MATERIAL DISPOSAL COSTS

We have performed an analysis of our total dredging data to obtain the trends from Fiscal Year 1986 through 1993. As stated previously, dredging quantities remain relatively stable at about 300 million cubic yards per year. However, annual dredging costs have increased from about $390 million in 1986 to about $540 million in 1993. The increased costs with relatively stable quantities results from several factors. Two of these factors are inflation in the dredging costs and increased environmental requirements (such as longer disposal distances to find acceptable disposal sites, requirements for contained disposal facilities to dispose of contaminated materials, and monitoring for endangered species).

FEDERAL/LOCAL COST SHARING ISSUES

Federal and non-Federal responsibilities for dredged material disposal vary from project to project, port to port and region to region, depending on when and how the project was authorized. Another problem is the varying Federal and non-Federal shares depending on the disposal method. As a general rule, open water disposal costs are borne by the Federal government, whereas, upland and confined disposal costs are usually non-Federal. This creates a strong economic incentive for a non-Federal sponsor to support open water disposal. The need for a reexamination of Federal law and policy with respect to dredged material disposal areas was recognized in section 216 of the WRDA of 1992. Section 216 directed the Secretary of the Army to conduct a study of the need for changes in Federal law and policy concerning dredged material disposal. The Corps of Engineers has initiated this study and will complete it in Fiscal Year 1995. The port community has already proposed cost sharing changes for confined disposal facility construction.

ARMY PLANS FOR EFFECTIVE MANAGEMENT OF THE DREDGING PROGRAM TO KEEP THE NATION'S PORTS OPEN TO TRADE

To provide effective management for the volumes and types of dredged material that we must deal with and to meet differing regional and local needs, we must continue to use all of the available options for both the mid-term and long-term on a project- and permit-specific basis.

At a National level we are concentrating on a number of different areas to address the problems of dredged material management. These include making the dredged material evaluation, testing and permitting process more efficient; developing a national dredging policy; improving interagency and external coordination; promoting dredged material management planning; reconsidering policies for financing the cost of dredged material disposal; promoting the beneficial use of dredged material and fostering research on dredged material disposal and contaminated sediments.

INTERAGENCY AND EXTERNAL COORDINATION

Another key element in improved dredged material management is better interagency and external coordination. Successful dredged material management will require the cooperation of the ports, Federal and State regulatory and resource agencies, state governors, and other elected officials as well as the support of the general public. We have several initiatives underway to build these kinds of partnerships at the national and regional level. For example, over the past year we held a series of regional meetings with ports throughout the country to build a stronger partnership and resolve issues of mutual concern. We now contemplate a second series of regional workshops that will not only include the Corps and the ports but also Federal and State regulatory and resource agencies. We believe these kinds of workshops can spark commitments to stronger partnerships and trust among the Corps, the ports, and the State and Federal agencies. On a regional level, the Corps is participating with other Federal, State and local agencies and groups in regional forums which have been established at a number of locations to address dredging and disposal issues and examine future disposal. These successful local coordination mechanisms must be replicated in other regions. Improved coordination is also a major focus of the Interagency Working Group on the Dredging Process and the group has developed a number of options to improve interagency and external coordination.

DREDGED MATERIAL MANAGEMENT PLANNING

One of the key factors that has contributed to the seriousness of the problems we are facing at a number of locations is the absence of a comprehensive plan for dredged material disposal. It is clear that existence of such a plan would aid greatly in the disposal of dredged material. The Corps has recognized this challenge and issued dredged material management planning guidance last year which set a goal that every Federal project or group of Federal projects have an adequate dredged material management plan to meet immediate needs and projected needs for a 20 year period. These dredged material planning efforts, to the extent they address maintenance of Federal channels, will be Federally funded and reimbursable from the Harbor Maintenance Trust Fund. Currently, there are dredged material management planning efforts ongoing at 13 locations, and seven others are included in the President's budget for Fiscal Year 1995.

BENEFICIAL USE OF DREDGED MATERIAL

The Army has informally employed the concept of beneficial uses of dredged material within its national dredging program for many years and as formal policy since 1968. A recent Office of Technology Assessment study reported that about 95 percent of the sediments dredged from coastal waters each year (about 150 million cubic yards for both Federal projects and permitted activities) are considered suitable for a wide range of beneficial disposal options. Traditional beneficial uses would include wetland and upland habitat development, beach nourishment, land creation, and construction aggregate and industrial use. More recent efforts have included the use of clean dredged material from a nearby Federal or permitted project to cap contaminated material outside the navigation channel.

The Army's authority for beneficial uses of dredged material was originally limited to projects incidental to maintenance or construction and where there was no increase in cost to the Federal project or where the local sponsor would pay the increment of increased cost. Section 145 of the Water Resources Development Act (WRDA) of 1976, as amended, authorized beneficial placement of dredged material on beaches. This authority, justified primarily as hurricane and storm damage reduction, requires that the beach remain in public use and that a non-Federal sponsor provide 50 percent of incremental costs. Section 1135 of the 1986 WRDA, as amended, provides further opportunities for beneficial uses of dredged material. Finally, based on an initiative from the Army, a provision (section 204) was included in the WRDA of 1992 to authorize the Army to participate in projects to use dredged material for aquatic habitat and wetland creation, restoration and protection. Seventy-five percent of the incremental cost of the beneficial use would be paid by the Corps and 25 percent by a non-Federal sponsor. Any operation, maintenance, replacement and rehabilitation costs would be 100 percent non-Federal. The authority is applicable to the construction, operation, or maintenance of an authorized Federal navigation project and carries a $15 million annual appropriation limit. The Fiscal Year 1994 appropriations included $3 million for implementation. We have been working with the EPA, States and others to address issues associated with beneficial uses of dredged material and to improve the use of the authority.

NATIONAL REGULATORY ISSUES

We appreciate and share Congressional concerns regarding the efficiency and timeliness of permit decisions for dredging and dredged material disposal projects. We can assure you that the Army remains committed to effecting permit decisions on dredging projects in a timely fashion and in a manner that does not diminish our protection of the environment. In this regard, we are working with EPA and other Federal agencies to improve the regulatory process.

As you may be aware, we are implementing revisions to the Army's Regulatory Program resulting from President Clinton's Federal Wetlands Policy Initiatives, announced on August 24, 1993. While developed in the context of wetlands regulation, the improvements will also result in a more fair, flexible and efficient approach to dredging permits. As part of the President's Wetlands Plan, the Corps and EPA provided joint guidance to field offices which describes the flexibility afforded by the Section 404(b)(1) Guidelines() in rendering permit decisions. The guidance emphasizes that the level of analysis for permit decisions will be commensurate with the relative severity of the potential environmental impacts to waters of the United States. Potential impacts to ocean waters are likewise evaluated in conjunction with the ocean dumping criteria.

The Corps of Engineers is producing regulations which will generally require that most decisions on permit application decisions be made within 90 days of the date of the public notice. In addition, the Corps is producing regulations which establish an administrative appeals process whereby applicants would be able to appeal Corps permit denials. These regulations are currently scheduled to be proposed in the Federal Register later this summer. Provided that the Corps receives the level of funding requested for the Corps Regulatory Program in the President's budget, the Corps is committed to fully implementing these provisions. These provisions, in conjunction with the joint guidance on Guidelines flexibility, will improve Regulatory Program efficiency which will also benefit permit applicants whose projects involve wetlands or dredging and dredged material disposal.

NEW YORK AND NEW JERSEY HARBOR

A recent action regarding regulation at the Port of New York and New Jersey has both local and national significance. In response to unresolved permit applications in New York and New Jersey Harbor, we convened a meeting on March 25, 1994 with EPA. Attendees included representatives from headquarters, field, and laboratory elements of both agencies. The result of the meeting was an "Action Plan For Resolving New York Harbor Permit Issues" (Action Plan), dated April 8, 1994. While the Action Plan was formulated to address dredging projects in the Port of New York and New Jersey, elements of the plan are applicable to national dredging and dredged material disposal issues as well. For example, EPA issued an interim final and a proposed rule in the Federal Register on May 20, 1994, which clarifies that bioaccumulation testing of the suspended particulate phase is not required. Following this action, the Army Corps of Engineers New York District immediately issued seven of 28 pending permits in the Port of New York and New Jersey. In addition, the Corps and EPA have formulated testing protocols to address the problem of excess ammonia in sediments to be tested, and our respective agency laboratories are working with private labs to improve the consistency and dependability of toxicity testing of benthic-dwelling animals.

As called for by the Action Plan, the Corps and EPA recently completed guidance addressing the "shelf life" of dredged material testing results. This guidance clarifies that permittees are not required to re-test their sediments every three years. Rather, there will be a re-evaluation in order to determine if re-testing is appropriate. That re-evaluation uses existing information to determine if changed circumstances, e.g., spills or new discharges, might have altered the character of the sediment sufficiently to warrant actual re-testing. We are also beginning work on a draft memorandum of agreement with EPA to provide for more efficient coordination between the Corps and EPA regarding Corps regulated activities, as well as Federal dredging and dredged material disposal activities.

In addition to the above, the Corps and others are participating with EPA in developing a risk-based approach to evaluate the suitability of disposal of sediments containing contaminants, including dioxin. The Army believes a standardized approach for establishing contaminants management thresholds, rather than a nationwide standard, best addresses the unique, region-specific factors that may result in a contaminant having more harmful impacts in some areas than others.

Finally, in conjunction with the Action Plan, our respective agencies have committed to pursuing both short-term dredged material disposal alternatives, e.g., subaqueous borrow pits, and long-term actions, e.g., Dredged Material Management Forum and Dredged Material Management Plans, to actively involve all interested parties in the formulation of long-term dredged material management plans. Focusing on the problems concerning dredging permit applications in the Port of New York and New Jersey has demonstrated the inefficiency and frustration associated with attempting to resolve major technical and policy issues within the context of the permit application evaluation process. This approach to issue resolution has also demonstrated that these broader program issues are best addressed during long-term planning.

We share your desire to avoid permit application evaluation delays in the future. Many of the actions discussed above, most importantly development and implementation of long-term dredged material management plans, cannot be achieved by the Federal regulatory agencies alone. These actions will require commitment, creativity, and energy from all involved parties with a stake in dredging and protecting the aquatic environment. We will continue our efforts in support of the development of necessary partnerships, as well as for communication and planning efforts for managing dredged material. Again, we believe such administrative initiatives are greatly improving Regulatory Program responsiveness to dredging and dredged material disposal projects without sacrificing environmental protection.

EVALUATION AND TESTING

Our ongoing initiatives with EPA to revise and update the Federal environmental guidance for testing and evaluating proposed discharges of dredged sediment are of high priority. The Green Book was originally published in July 1977 and most recently revised jointly by the Corps and EPA in the spring of 1991. It contains important technical implementation guidance for testing sediments proposed for ocean disposal. The Green Book utilizes biological testing, with chemical analysis as necessary, to provide effects-based conclusions within a tiered framework. Under a tiered framework, more sophisticated testing is used only when necessary for decision making. Several regional Green Book implementation manuals, which are an important component of this national process, have been completed.

There are many similarities in the procedures for dredged material testing between inland and near coastal waters and the oceans; however, differences do exist. This is due to the slightly different regulatory approaches under the implementing regulations of the CWA and the Ocean Dumping Act. To further enhance the consistency in testing procedures, the Corps and EPA have formed a working group that is completing a draft "Inland Testing Manual" that is patterned after the Green Book. We believe that implementation of the Inland Testing Manual will provide even more consistency for dredged material testing. The availability of this draft manual for review will be announced in the Federal Register this summer.

The Corps and EPA recently issued a comprehensive technical management strategy, entitled, "Evaluating Environmental Effects of Dredged Material Management Alternatives - A Technical Framework," designed to identify environmentally acceptable disposal options for all dredged sediments. This document serves as the overall umbrella guidance in managing contaminated sediments. Our approach is to develop and apply a consistent evaluation framework, not only for sediment contamination testing, but also for providing effective controls of contaminated sediments for the full array of management options. We believe that this document, in conjunction with the testing guidance noted, will be particularly helpful in any future federal initiatives involving management of contaminated sediments.

TECHNOLOGY DEVELOPMENT AND TESTING

The Corps of Engineers has developed a research base over the last two decades that emphasizes the identification, assessment, and management of contaminated sediments. Contaminated sediments are defined in relation to our navigation program as those that demonstrate an unacceptable adverse impact on human health or the environment. Because of its research and its active participation in the London Convention and other international efforts, the Corps is recognized as an expert in dealing with contaminated sediments.

Environmental research on dredged materials in the 1970's was broad in scope, including the basic understanding of ecological impacts associated with management of clean and contaminated dredged material. Research in the 1980's focused on contaminated sediments. This work was done jointly with EPA to enhance the identification, assessment and management of contaminated materials. Research efforts in the 1990's focus on highly contaminated materials, emphasizing chronic/sublethal effects and genotoxicity evaluations. It continues efforts from the 1980's to enhance capability for cleanup and remediation of hot spots, risk analysis, endangerment assessments, and treatment technology. The Corps of Engineers, in support of EPA's Assessment and Remediation of Contaminated Sediments program on the Great Lakes, has considered and/or researched to varying degrees the following treatment technologies: *in situ* vitrification; in line particle separation and pipeline injection; bioremediation; incineration; extraction; thermal desorption; and well injection and ocean disposal in abyssal plains. We do not view any single dredged material treatment technology or management alternative as a panacea. Rather, each option must be considered on a project specific basis applying environmental protection, engineering practicability, and economic criteria.

LEGISLATIVE PROPOSAL

In 1992, Army proposed legislation on beneficial uses of dredged material. Congress enacted similar legislation in Section 204 of the Water Resources Development Act of 1992 to give Army another management measure to help in our dredging mission. In addition, the work of the Interagency Working Group on the Dredging Process may result in legislative proposals.

CONCLUSION

The Army will continue to execute its responsibilities to maintain a strong port, harbor and navigation system to continue our nation's role as the leading world economic power, while recognizing the critical national need to protect the environment.

Mr. Chairman, and other members of the Subcommittee, this concludes our statement. Mr. Davis and I would be happy to answer any questions you or the other subcommittee members may have.

TESTIMONY OF CHARLES R. ROBERTS
EXECUTIVE DIRECTOR, PORT OF OAKLAND
BEFORE THE HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE,
SUBCOMMITTEE ON MERCHANT MARINE
JUNE 16, 1994

Good morning Mr. Chairman and Members of the Subcommittee. My name is Charlie Roberts, and I am the Executive Director of the Port of Oakland. I appreciate the opportunity to appear before your Subcommittee today, and offer my thanks to you for focusing on the subject of ports and the impact of the dredging crisis on ports and our intermodal transportation system. In addition to my capacity as Executive Director of the Port of Oakland, I also appear today on behalf of the American Association of Port Authorities. I co-chair the Dredging Caucus formed within AAPA, along with Lillian Liburdi from the Port of New York and New Jersey. The Dredging Caucus was formed about a year ago, with a mandate to push for legislative and regulatory reforms that would address, and hopefully resolve, the dredging crisis. There are over forty U.S. ports that are members of the Dredging Caucus.

DREDGING IS DISPOSAL

Mr. Chairman, in recent years, the federal government and port facilities have found it increasingly difficult to proceed with dredging operations, primarily due to the controversy surrounding disposal of dredge material. As a result, ports and the U.S. Army Corps of Engineers have faced months and even years of delays in beginning harbor deepening projects as well as maintenance dredging of both federal navigation channels and berths. This has adversely impacted ports on all U.S. coasts, and the entire maritime industry. Ports such as New York, Boston, Baltimore, Savannah and the Port of Miami River on the East Coast; Los Angeles, Long Beach, Oakland, Tacoma and Seattle on the West Coast; New Orleans and Houston in the Gulf; and Toledo and Duluth in the Great Lakes all have experienced delays in beginning either deepening or maintenance dredging projects. Furthermore, all of these ports, as well as many more, have future maintenance or deepening projects, the success of which will depend on the expediency of permit approval. The bottom line is that today, dredging is disposal. Ports' dredging projects have been prevented or delayed because of environmental concerns over disposal of the dredge material. Too often, the frequently distorted "environmental consequences" of dredging receive attention while the economic consequences of not dredging, i.e. the impacts on trade and employment as they relate to local, national and world economies, receive little focus.

Dredging isn't simply removing silt and sand from the bottom of harbors. It's preserving and creating the kind of jobs, and generating the type of wages, taxes and other economic benefits that the Clinton Administration and Congress are working so hard to provide. Yet sadly, this is not happening at many of our Nation's ports. I am holding a stack of trade press articles and editorials from just the past few months. Mr. Chairman, with your permission, I would like to enter these into the record.

Let me read just a few headlines -- "New York - New Jersey Dredging Woes Could Force Ships Out"; "Channel Access Problem In Boston Delays Boxship"; "Missed Call Spurs Demand To Speed Boston Dredging"; "Port of Providence Scurries to Dredge Its Choked Channel"; "Dredging Delays Prove Costly For Richmond, Virginia Port Interests"; "Inability to Dredge Forces Firms To Improvise to Get Ships to Berths". The problem is serious, it is Nationwide, and it must be solved this year.

LOST JOBS AND ECONOMIC ACTIVITY

Let me give you an example of the economic impact from the lack of dredging. West Coast shipping activity is booming because of the growth of trade with the near and far East, and the development of efficient intermodal systems to move cargo to and from the interior and eastern regions of our country. Yet the San Francisco Bay Area ports have experienced a substantial drop in the share of West Coast containerized tonnage that they handle. The reason is the lack of adequate channel depth to accommodate the new generation of containerships. The Bay Area's share of this tonnage has dropped from approximately 28% in 1980 to approximately 17% today. If the Bay Area had retained its 28% share, there would be substantially more jobs available for citizens of the area today, as a direct and indirect benefit of shipping activity. We estimate that there would be approximately 4,500 more Bay Area jobs today directly related to shipping activity, with an estimated payroll of $150 million. If one also considers the jobs created indirectly, the figure would be approximately 6,500 jobs, with additional business revenue of approximately $550 million annually. Further, if one was to consider an even more expansive definition of "indirect" jobs created by the Bay Area maritime activity -- the Hewlett-Packard technician, the people who build Toyotas at the nearby NUMMI plant, the Toyota salesman, the farmer in the Sacramento valley -- the number of jobs is literally in the tens of thousands, and payroll and tax figures in the hundreds of millions of dollars.

STATUS REPORT

The good news, Mr. Chairman, is that two years ago we were able to complete Phase I of our channel deepening project, which took our inner harbor down to -38 feet. It took twenty (20) years to get to the point of starting this project. Further, the second phase of our dredging project, which will take both our inner and outer harbor down to -42 feet, will begin in December. This required a united effort on the part of industry, labor and even environmental interests; it took the leadership and cooperation of our Congressional delegation and the federal, state and local regulatory agencies. And in the case of our upcoming -42 foot project, it took the intervention of the President of the United States.

But there is also bad news. The bad news is that in the Bay Area and around the country, other deepening projects continue to experience delays. Even more ominous is the issue of maintenance dredging, and the question over where to dispose of maintenance material and who should pay for it. To me, this is a looming crisis which has only begun to surface, and deeply threatens the efficient operation and safe navigation at every port in this country. Over 90 percent of the nation's top ports require regular maintenance dredging. Together, they move nearly 93 percent of all U.S. waterborne commerce annually, yet many ports have suffered severe delays in performing maintenance dredging.

The issue is this -- the Water Resources Development Act of 1986 established for new construction a cost sharing requirement between the local sponsor of a dredging project and the Corps of Engineers. This was based upon the concept that navigation projects have both a local and national benefit. Speaking generally, if the dredge material for new construction is disposed of in a water site, it is cost shared. If any material is disposed of at "upland" or confined disposal facilities, the local sponsor pays 100%. However, for maintenance dredging of federal channels, the Corps of Engineers has 100% responsibility, again, due to the national benefit of waterborne commerce activities. But WRDA '86 does not mention who should pay for the disposal of maintenance material from federal channels that needs to go upland or to a CDF.

The Corps has taken the position that they do not have the authority to pay for upland disposal of maintenance material, and perhaps, their interpretation of the current law is not without foundation. But as sediment standards become more strict, and as scientific testing procedures become more sophisticated, there will be more and more material, both new material and maintenance, that will need to go upland. Ports simply will not be able to afford the costs of dredge material disposal.

The injustice lies in the fact that, to the extent contaminants are present in dredge material which make it not suitable for unconfined aquatic disposal, these contaminants are usually not the result of port related activities. Rather, they are from traditional point and non-point sources far from the navigational channels. The regulatory efforts seems to be directed toward the symptom -- dredging -- rather than at the source of the problem, the original discharge. This misdirection of efforts does not benefit the environment, although it does hurt the economy.

NATIONAL DREDGING POLICY

If the dredging gridlock is to be broken, federal legislation and regulatory changes this year presents the best, and perhaps only, hope for success. The President of the United States cannot, nor should not, have to intervene in every dredging debate. Over the past year, the public port community as been active in seeking legislative and regulatory changes that will enable dredging projects to be approved expeditiously, while still allowing the work to be accomplished in a cost-effective and environmentally sound manner. To that end, we have called for the adoption of a "National Dredging Policy" which would include both legislative and regulatory changes. I have submitted a summary of this proposal with my written testimony.

The policy indicates the need for changes to the Clean Water Act and Water Resources Development Act. The changes to the Clean Water Act would remove dredging from Section 404 and develop a new section exclusively for the control of dredging. This section would establish three categories for dredging material and set up time limits for developing the categories and issuance of permits.

The changes that the National Dredging Policy would add to the Water Resources Development Act deal with cost sharing for all disposal methods. In other words, the present 25%/75% cost sharing for water disposal would also apply to restricted water disposal and upland sites. The same sort of cost sharing would apply when dredged material is used for beneficial uses such as wetland development and beach nourishment. Further, we suggest amending the Water Resources Development Act to require the Corps to fund all maintenance dredging projects for any disposal method, i.e., water disposal, confined water disposal and upland disposal. We are currently developing proposed language which we will recommend for inclusion in the Water Resources Development Act.

We applaud the fine work of the Inter-agency Working Group on the dredging process that was established last year, which is considering our recommendations. I don't know if I've ever seen a group of agencies make one, let alone two, sets of "outreach" visits across the country to discuss an issue. It's refreshing and we appreciate their efforts.

CONCLUSION

Mr. Chairman, over the past twenty years, I, along with my colleagues in this industry, have seen the dredging problem grow to the crisis that it now is. Yet despite the past several years filled with hardship and heartache, experiencing the economic loss and suffering from inhibited growth, we are optimistic. We are optimistic because we feel that we are making progress for the first time. Your hearing today has taken us a long way toward reaching our goal, and we are very appreciative. Yet I add this final admonition -- the Clean Water Act and Water Resources Development Act must be passed this year, and each bill must address this problem. Otherwise, I fear we will lose the focus that we currently have, and thus our window of opportunity for solving the dredging crisis.

Again, thank you, and I will be happy to answer any questions.

TESTIMONY

of
John M. Loftus
Seaport Director, Toledo-Lucas County Port Authority

to

Subcommittee on Merchant Marines
House Committee on Merchant Marine and Fisheries
June 16,1994

I would like to thank you Mr. Chairman, and Members of the Subcommittee, for allowing me to testify today on the very important issue of dredging and its impact on port competitiveness.

I am John Loftus, the Seaport Director for the Toledo-Lucas County Port Authority. Today, at the request of Mr. Kenneth Szallai, the Port Director of Milwaukee and Chairman of the American Great Lakes Ports, I am also representing the views of that organization.

I have been responsible for ongoing maintenance dredging at the port of Toledo since coming to Toledo in 1985. Prior to that, I worked on dredging issues while serving on the Staff of Senator John Glenn. In that role, I had the privilege of working with several other House and Senate staff members on the cost sharing formula enacted in the 1986 Water Resources Development Act. As a result, I became aware then, and even more since, of the impact of dredging and cost recovery on the competitiveness of the Great Lakes/St. Lawrence Seaway System.

Let me begin by stating just how important dredging is the Great Lakes ports. It is not just a matter of competitiveness, IT IS A MATTER OF SURVIVAL!!! Many of our fellow ports on other Coasts, have options of dredging deeper in order to enhance their competitive position. By going deeper these ports can attract the larger colliers and bulkers to carry coal and grain to and from their ports. Great Lakes Ports do not enjoy this luxury. The Great Lakes are limited to 26 feet 3 inches of draft for ocean going vessels. That's it! We cannot go deeper due to the limits imposed by the locks on the St. Lawrence

Seaway System. Depth for the intra-Lakes trade (those cargoes not transiting the Welland Canal) enjoy slightly deeper draft of 27 feet. But the fact remains, the Great Lakes ports do not have the option of considering 55, 45, or even 35 feet of draft. We are stuck with what we have.

In the Great Lakes, if my port or any other port for that matter is not dredged, for whatever reason, vessels will not just lighten their load, they will not come at all. If Toledo cannot accommodate 26 feet of draft then a vessel will go to Detroit or Cleveland. If Chicago has a draft problem, the vessel will sail to Milwaukee or Burns Harbor. What is unique to our coastal range is that the whole Great Lakes/St. Lawrence Seaway system must be maintained throughout at appropriate depth. If the system is not maintained, vessels will not even enter the system; they will discharge their cargo in Montreal or other eastern ports outside the system. That is why dredging is needed for SURVIVAL, not only at our individual Great Lakes ports, but for our whole system.

Some other aspects of the relationship of dredging to the competitiveness of American Great Lakes ports also should be noted. Assuming the dredging is maintained at 27 feet so we can survive, there still is the impact of the tax used to pay for it. The harbor maintenance tax was adopted in 1986 to pay for 40% of the Army Corps of Engineers Operations and Maintenance budget, though concerns were expressed at the time about its negative impact on U.S. exports. Only four years later, Congress more than tripled this tax burden to 125%, and its substantial revenues in excess of what the Engineers spend on our maintenance dredging now just go into the general Treasury fund.

Anyone who doubts what maritime trade taxes such as these do to U.S. export competitiveness should check with American shippers. Grain is a major export from Toledo, and my grain people tell me that just a few cents a bushel can make the difference in the world markets as to whether the sale goes to an American or a foreign supplier. We in the Great Lakes, of course, have the added disadvantage of diversion of our cargoes through nearby Canadian ports with whom we are in direct competition, since they pay no harbor maintenance tax for their dredging. We ask that Congress show more awareness of the need for competitiveness in U.S. maritime trade, and specifically that it cap the harbor maintenance tax and roll it back to the originally agreed level.

Ports have argued for some time that dredging, especially on the Great Lakes where the material is placed in confined disposal facilities, actually helps clean the aquatic habitat, not defile it. Moreover, other important environmental issues are at stake. Water transportation is the most energy-efficient means of moving product. It is also the least congestive and the safest. A recent study by the Great Lakes Commission provides some dramatic findings on consumption and contaminant emissions in comparing water, rail or highway transportation [see Attachment 1]. Let me cite three of the 11 scenarios explored: (1) taconite movements from Minnesota to Northern Ohio; (2) Steel from Rotterdam to Cleveland [comparing an all-water movement to Cleveland as opposed to a water/rail movement through Baltimore]; and (3) wood pulp from Thunder Bay, Ontario to Superior, Wisconsin. This last example has special significance.

In the case of taconite movements, water transportation consumed 60% of the fuel that rail would have required in either case, and produced only 47% of the emissions. Steel movements to Cleveland were not as significant, because so much of the movement would involve water transportation, but the results did show the all-water move would consume 88% of the fuel and produce only 90% of the emissions.

The pulp movement from Thunder Bay to Superior provides an outstanding example. In this case, the water route consumed only 57% of the fuel and produced only 62% of the emissions. Unfortunately, the harbor maintenance tax increase of 1990 damaged the competitiveness of the marine mode on this run: The ***Incan-Superior***, a Thunder Bay-Superior rail car ferry, was forced out of business. The vessel now serves ports in Western Canada, where there is no harbor maintenance tax, and the pulp movement now goes overland.

The Commission study shows even greater energy and emission benefits, for marine, when compared to highway movements. Other advantages of water movements include fewer tires for disposal in landfills, less congestion in urban areas, and enhanced safety for the public.

Any way one wishes to measure it, the cost benefits to the nation of adequate dredging are immense. I have just mentioned the environmental advantages of waterborne carriage as compared with the energy and emissions impact of competing modes.

The economic impact for an area such as the Great Lakes is almost beyond calculation. We have the core of the American steel industry. We have the nation's auto manufacturing capital. We are a great agricultural region. Marine transport is important to them all. How would these industries fare if our ports shut down for lack of dredging? To say the least, there would be severe dislocations and impairment to untold numbers of workers and businesses.

The Seaway system itself, handling international trade, generates billions of dollars of economic activity on the U.S. side, as well as Canada. According to a 1992 study commissioned by the St. Lawrence Seaway Development Corporation [see Attachment 2], the Great Lakes/Seaway trade alone is responsible for 44,000 U.S. jobs in the region. What value do we place on those jobs? When I am in Toledo I like to use the example of the local Jeep plant, the area's largest employer. When describing the significance of a threat to 44,000 jobs, I usually tell the people in Toledo, it is the equivalent of losing 8 Jeep plants. In this day and age, as we all watch states bid against each other for auto assembly plants, we can each do the calculations as to the significance of these jobs.

What is the basic problem causing today's dredging crisis? In simple terms, the problem is the lack of clearly defined rules. The dredging cost-sharing formulas adopted by Congress have different requirements, depending on whether the dredging involves a new project, maintenance dredging, or environmental standards. Depending upon how the bureaucracy interprets the law of the specific case, waterborne transportation will be forced to pay additional costs. Three examples come to mind involving Great Lakes projects in Duluth, Milwaukee and Toledo. Each is a different situation, but all involve bureaucratic interpretation of the rules and excessive costs, as a result.

The situation involving Duluth was brought before this Committee in the past. It involves a project that dates back over 30 years which would have deepened the Federal Channel further up the River. Due to the lengthy process involved with a Corps project, the Duluth improvement was only recently ready to go to construction. The project was scaled back substantially and due to the passage of time was now governed by cost sharing as established by WRDA 86. My colleagues in Duluth understood this but felt the project was important enough to move forward. In order to meet the local cost requirements, port officials knew they must seek a special appropriation from the State legislature. Before undertaking such an effort the port sought the absolute last word on the project cost and the local share. After assurances from the Corps on the local cost, the port staff, through much effort, was able to secure the special appropriation from the State. Within 2 months, the Corps notified the port that the local share was revised up by nearly 30%.

The second example involves maintenance dredging in Milwaukee. As you are well aware, the Clean Water Act provided for the construction of confined disposal facilities (CDFs) to retain dredge material removed from harbors on the Great Lakes. This was done in an effort to remove contaminated sediment from the aquatic habitat of the Great Lakes. When WRDA 86 was passed, it was the port's understanding that the Harbor Maintenance fee would pay for maintenance dredging, including new CDFs. Unfortunately, in the case of Milwaukee, the Corps is defining the construction of CDFs as a new project with cost sharing required. WRDA 86 envisioned cost sharing for projects that would provide new opportunities and additional revenues to meet cost sharing requirements. Ongoing maintenance dredging does not provide additional revenues to meet these cost sharing requirements.

The last example, and one near and dear to my heart, is the controversy surrounding the Corps' dredge disposal practice in Toledo, Ohio. This issue arose shortly before I began working at the Port Authority and has been a constant irritant for the past 9 years. This issue involves the State of Ohio's responsibilities under section 401 of the Clean Water Act and the Corps' responsibilities under section 404. According to section 401, the state is required to set water quality criteria which is submitted to the U.S. EPA for approval. When approved by the U.S. EPA, the state is responsible for enforcing what amounts to Federal standards. The Corps, on the other hand, is responsible for establishing disposal criteria under section 404, which is also submitted to U.S. EPA for approval. In the case of Toledo, the Corps' 404 disposal practice violated the State's 401 water quality criteria. The Corps is willing to comply with the State's requirements only under the condition that any additional cost associated with such practice would be paid by the local sponsor, i.e. the port.

The difficulty here is that the Corps argues that the state's requirements exceed those of the Federal Government. The Port and state have argued that the 401 standards are required by the Clean Water Act and approved by the U.S. EPA and are Federal standards. Earlier this year, a letter was sent from the Corps' Buffalo District office to U.S. EPA, Region V requesting clarification on this issue of state standards being more stringent than Corps requirements. The response was less than clear (see attachment 3). Let me quote from the Region 5 response:

> "There is no such thing as a "more" stringent State Water Quality Standard since there is no such thing as a Federal Water Quality Standard, in the specific sense in which you appear to utilize that

> term in your letter. The term "Federal Standard" is used in your letter in the sense of "Federal Water Quality Criteria." Federal Water Quality Criteria are advisory in nature, and they were developed by our Agency in response to Section 304 of the Clean Water Act which states may use in developing their Water Quality Standards. A State may adopt more stringent water quality criteria as part of its Water Quality Standards pursuant to section 510 of the Clean Water Act. Since State 401 certification is based on State Water Quality Standards, including water quality criteria, EPA has no authority to object to more stringent State Water Quality Criteria or a certification based on them."

The EPA in this case failed miserably in answering the question. Instead the EPA is willing to allow the state of Ohio, the Port Authority, and the Corps to continue the on-going struggle over which is a real Federal Standard, those established through section 401 or section 404. In addition, the Corps continues to threaten the port with an end to dredging if the state standards are allowed to control this issue.

What steps toward a solution can I offer? To begin, Congress must attempt to be clear when establishing Federal policy. The three examples cited are just a representative sample of the many ongoing controversies nationwide involving dredging. This is wasting countless hours of staff time and getting in the way of dealing with long-term solutions to the dredge management issue.

A second step, and one that has special application to the Great Lakes, is the establishment of a final arbiter who has the authority to step in and resolve these differences. In the Great Lakes, St. Lawrence Seaway Development Corporation could possibly serve in this role.

As another possible step, Congress may wish to achieve greater efficiency within the Federal bureaucracy. Would the Corps' duties be better administered through another Federal agency such as the Maritime Administration or the St. Lawrence Seaway Development Corporation?

The Committee should also recognize that in virtually all cases, that ports and carriers are not the responsible parties for placing contaminants in this nation's harbors and channels. Consequently, ports and carriers should not be singled out to pay for their clean-up.

In summary, dredging for U.S. Great Lakes ports is necessary for our survival. Without it, we cannot compete. An excessive harbor maintenance tax for dredging costs also hurts our competitiveness, particularly vis-a-vis Canadian ports. Adequate dredging offers huge economic benefits provided by maritime trade on the Great Lakes. It likewise allows large environmental benefits. Finally, dredging is in crisis today because of lack of clearly-defined rules. Congress should institute a better process.

test2.jml

ATTACHMENT 1

International Distribute

VOLUME 21 NUMBER 4 FIVE DOLLARS

SEAWAY REVIEW

1992 season shows modest gains domestically ■ Port profile: Montreal ■ The outlook for export coal

Modal shift study findings favorable to maritime transportation

Compared to rail and highway, water transportation is the most economical way to move cargo

Maritime transportation on the Great Lakes/St. Lawrence Seaway System is safer, uses less fuel, produces fewer air pollutants, has fewer noise problems and creates less congestion than either rail or truck, when compared with equivalent commodity hauls.

These were the findings of a study recently completed by the Great Lakes Commission (GLC) with funding from regional U.S. and Canadian maritime interests. The stimulus for the study entitled, "Great Lakes and St Lawrence River Commerce: Safety, Energy and Environmental Implications of Modal Shift," was a paper released in 1991 by the Minnesota Department of Transportation that identified the environmental and safety impacts that would occur if waterborne cargoes in Minnesota were shifted to land transportation.

The Great Lakes Commission used a methodology similar to the Minnesota DOT's but expanded the breadth of its study to include a variety of commodity movements within the Great Lakes/St. Lawrence Seaway System. Also added were comparisons among the various transportation modes of air pollutant emissions, noise levels and congestion issues.

Used as the basis of the study were 11 movement scenarios (see list to the right), representing a range of products and raw materials moving on the Great Lakes/Seaway. (See sidebar on page 29 for an example of one of the movement scenarios.)

For each of these scenarios, annual waterborne tonnages were translated into equivalent movement by surface mode In all cases, a rail movement alternative was analyzed and in the three where it was feasible (case numbers 4, 8 and 11) the motor carrier option was also examined

Fuel use and efficiency. Fuel efficiency was a key element of the study since the transportation industry accounts for 27 percent of total energy use in the U.S. and 28 percent in Canada The transportation sector's almost total dependence on petroleum-based fuels invites serious questions about potential pollution, availability and cost.

Among rail, truck and water modes, waterborne transport is the most energy efficient for large tonnage movements Totalling all modal shift scenarios, fuel use for cargoes moved by water was 32.3 million gallons The same cargoes, when moved by rail, required a consumption of 46.4 million gallons, or 43.5 percent more fuel than the waterborne mode

In the three scenarios that included analyses of motor carriers, fuel usage by waterborne modes was less than half that of trucks in two cases and about 74 percent less in the third

The disparity between waterborne and the other modes is even greater when the two scenarios involving liquid bulk cargoes are not factored in. This is because the tanker vessels plying these trades in the Great Lakes/Seaway System are relatively older and less fuel efficient than other vessels operating in the System.

Fuel efficiency varies within the Great Lakes fleet. The range among dry bulk carriers goes from 520 ton-miles per gallon for cement

Annual fuel use and emissions for modal shift scenarios

	MARINE		RAIL		TRUCK	
Scenario	Fuel use (million US gallons)	Total Emissions (net tons)	Fuel use	Total Emissions	Fuel use	Total Emissions
1	818	259 08	1 219	351 20		
2	7 215	2,290 60	14 498	4,175 30		
3	9 587	1 983 33	14 044	4 044 60		
4	216	7 86	160	46 28	543	95 21
5	1 048	332 82	479	138 05		
6	1 519	482 33	582	167 63		
7	3 930	1 248 06	5 560	1 601 41		
8	264	83 90	460	132 69	998	174 7
9	4 413	1,401 16	5 835	1,730 85		
10	1 745	554 15	1 805	520 37		
11	1 835	519 19	1 841	575 03	3 979	911 13
TOTAL	32.306	9,182 58	46.483	13,483 46		

Movement scenarios:

1 Potash from Thunder Bay to Toledo.
2. Coal from Superior to St. Clair, Michigan.
3. Taconite from the Minnesota North Shore to Lorain.
4. Cement from Alpena to Detroit.
5. Petroleum products from Sarnia to Montreal.
6. Petrochemical products from Sarnia to Chicago
7. Grain from Thunder Bay to Quebec.
8. Paper and wood pulp from Thunder Bay to Superior.
9. Iron ore from Sept-Iles to Hamilton, with combined vessel/rail alternative through Quebec City
10. Coal from Sandusky to Hamilton.
11. Steel from Rotterdam to Cleveland with truck/rail alternative through Baltimore.

The center of North America.

The closest inland connections, low port costs and great service all help make Duluth the Great Lakes No. 1 port in total tonnage agricultural products, low-sulfur coal, iron ore, heavy lifts, and general cargo.

DULUTH
MINNESOTA'S WORLD PORT

Seaway Port Authority of Duluth
Box 16877
Duluth, MN 55816 U.S.A.
Phone: 218/727-8525
FAX: 218/727-6888

No one's closer.

Port of Windsor.
Moving business forward.

We're specialists at moving North America's business forward. Aggregates, grains, lumber, steel and fluorspar - from bulk materials to heavy lifts - we handle it all.

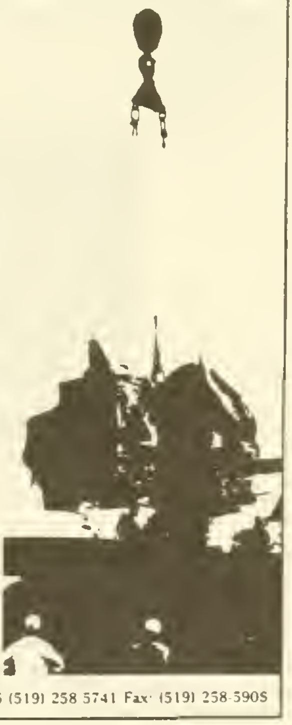
The Port of Windsor meets your complete shipping and forwarding needs. Our full, modern docking facilities provide up-to-date loading and unloading as well as indoor, outdoor, and bonded storage. Our bunkering facilities provide easy access and 24 hour service.

And our location provides ideal connections with Canadian and U.S. rail, air and land routes. For more information write or phone the Windsor Harbour Commission.

The Port of Windsor. Moving business forward. Moving forward with business.

WINDSOR HARBOUR COMMISSION

500 Riverside Dr. West, Windsor, Ont. Canada N9A 5K6 (519) 258 5741 Fax: (519) 258 5905



carriers sailing from Alpena to Detroit to 1,426 ton-miles per gallon for 1,000-foot self-unloaders hauling coal from Superior to St. Clair.

Fuel consumption also varies with routes. Transits of the Welland Canal and Great Lakes connecting channels, for instance, require reduced speeds and lower fuel use compared to open lake movements.

Rail fuel efficiency has been improving with the reduction of empty car miles, heavier car loadings, optimal routings and speed control. According to the Association of American Railroads, revenue ton-miles per gallon of fuel consumed in freight service for Class I railroads increased from 206 in 1975 to 332 in 1990. Unit trains on dedicated runs with long trains, level terrain and few stops are the most fuel efficient rail movements.

Emissions analysis. The study analyzed emission rates for carbon monoxide (CO), nitrogen oxides (NOx) and hydrocarbons (HC), the most prevalent air pollutants attributed to transportation sources. Emissions from Great Lakes vessels vary by type of propulsion and fuel.

In its comparison of the three modes as sources of air pollutants, the GLC study found that the 13,483 tons of emissions that would be generated by railroad locomotives in the 11 movement scenarios is nearly 50 percent greater than the 9,162 tons calculated for the marine movements.

Diesel truck emissions were about twice as high as the waterborne mode in two cases. Truck pollutant levels were 12 times the waterborne level in the third situation (Alpena to Detroit) where low-polluting steamships were considered.

To evaluate the comparative safety of the different modes, the study used data from U.S. and Canadian transportation agencies and safety research organizations to determine the threat to life, the environment and property posed by transportation accidents.

For the three scenarios where the truck alternative was considered, the diversion of less than a million tons from the water route were seen as resulting in 141 accidents per year with nearly a quarter of them having potential for fatalities or serious injuries.

For the rail movements, derailment, collision and crossing accident rates were developed using federal data for the individual railroads. For all 11 scenarios, a shift to rail could statistically result in 14 derailments, one collision and 36 crossing accidents.

The number of potentially serious accidents for the marine mode, based on a ton-mile measurement, indicates the possibility of only four such accidents. Those scenarios with the greatest ton-mileage show higher accident potential. The study acknowledged the particularly severe consequences of open lake spills but cited 1990-91 data from Ontario showing that transportation-related spills represented only a quarter of all spills in the province during that period and that vessel tankers and bulk carriers were responsible for only two percent of the total.

> Totalling all modal shift scenarios, fuel use for cargoes moved by water was 32.3 million gallons. The same cargoes, when moved by rail, required a consumption of 46.4 million gallons, or 43.5 percent more fuel than the waterborne mode.

Noise, congestion. On the subject of noise, road traffic is considered the most serious problem since exposure levels are higher for the greatest number of people. Railyards and mainline trackage generate less sustained noise but result in considerable public aggravation. Noise problems associated with commercial navigation in the Great Lakes Seaway are not perceived as significant since most related noise is far from shore.

Regarding congestion, railyards are notorious bottlenecks and navigation locks have the potential to create delays, but road congestion is a leading transportation problem and is getting worse. Modal shifts from vessel to trucks for the three commodity movements including the truck option indicate an added 241 trucks a day, six days a week, and more than 21 million additional vehicle miles for the region's highways.

A greater modal shift to trucks to accommodate tonnage previously carried by vessels would overwhelm highways, many of which are located parallel to the water route.

The Great Lakes/Seaway region is not confronted by the prospect of immediate, broadscale modal shifts induced by either energy or environmental factors. Some shifts, of course, are occurring in the course of business and over time. Many factors including energy, safety and environmental impact will drive both investment decisions and regulatory policy.

As the importance to the transportation sector of weighing all these factors grows, resources such as the GLC's modal shift study will become increasingly vital to the process. ■

by Steve Thorp, Manager
Transportation and Economic Development
Great Lakes Commission

SCENARIO NO. 2
Coal from Superior, Wisconsin to St. Clair, Michigan

ANNUAL TONNAGE: 7,805,700 net tons

MARINE *676 miles, 1,000-ft diesel powered self-unloader, 66,150 tons of cargo, 1.426 TM/GAL (loaded, one-way); 118 annual roundtrips, 159,536 vessel miles*

RAIL *807 miles from Superior via Class II carrier, Conrail and Grand Trunk Western, 788 trains per year, each with three SD-40 locomotives and 90 110-ton hopper cars, 3.8 gallons per locomotive mile; 1,271,832 roundtrip train miles*

1,385 miles from Powder River Basin (Wyoming/Montana) via Burlington Northern, Conrail and Grand Trunk Western, 788 trains per year, each with three SD-40 locomotives and 90 110-ton hopper cars, 3 8 gallons of fuel per locomotive mile; 2,182,760 roundtrip train miles

	MARINE			RAIL FROM SUPERIOR			RAIL FROM WYOMING/MONTANA		
Fuel Use (U.S. gals) One-Way Annual	31,359 7,215,700			9,200 14,498,884			15,789 24 883,464		
Emmissions	CO	HC	NOx	CO	HC	NOx	CO	HC	NOx
One-way(pounds)	1,913	752 6	17,247	543	164 7	4,590 8	932 3	282 6	7 878 7
Annual (net tons)	220	86 6	1,984	428	129 8	3,617 5	734 7	222 7	6 208 4
Potential Accidents Annual	1 15			Derailments 6.07 Collisions 45 Crossing Accidents 14 5			Derailments 6 5 Collisions 62 Crossing Accidents 16 6		

Comments: The vessel shipment of low sulfur western coal at Superior, Wisconsin began in 1976 with the opening of the Superior Midwest Energy Terminal (SMET). Shipments from this facility have steadily increased in response to implementation of Clean Air Act restrictions on power plant sulfur emissions. Detroit Edison is a major customer of SMET coal, with its St. Clair generating stations accounting for more than two-thirds of the 11.4 million tons shipped in 1991

SMET receives an average of three 115-car unit trains a day from the Powder River Basin strip mines in Wyoming and Montana. For this scenario, a 20 percent shorter train was used to accommodate track and delivery conditions for eastern operations. One of the world's largest shiploading conveyors, rated at 10,500 tons per hour, transfers the coal to lake vessels. Several 1,000-ft. "supercarriers" figure prominently in these coal shipments, handling nearly three-quarters of the tonnage.

The coal terminal is exploring the potential for increased capacity beyond its 13 to 13.5 million ton capacity. With new sulfur emission reductions required by the Clean Air Act Amendments of 1990, many midwest utilities are planning for new western coal deliveries, and the rail-to-vessel transshipment option may play a role. Also under consideration are all-rail routings, inland coal terminals where western and other coals are blended for subsequent reshipment and overseas exports through the St. Lawrence Seaway.

ATTACHMENT 2

THE ECONOMIC IMPACTS OF THE GREAT LAKES/SAINT LAWRENCE SEAWAY SYSTEM

PREPARED FOR:
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION
STANFORD E. PARRIS, ADMINISTRATOR

SEPTEMBER, 1992

firms providing maritime services to ports of the Great Lakes/Saint Lawrence Seaway System.5 Since indirect jobs are not included, the results understate, to some extent, the full impact of the Great Lakes/Saint Lawrence Seaway System. However, to include such indirect jobs, developed by using theoretical rather than actual relationships, would have diminished the defensibility, accuracy, and usefulness of the entire study.

5.3 Tax Impacts Methodology

Tax impacts are estimated using the share of total income paid out in state and local taxes in key metropolitan areas, as developed by the "Consumer Expenditure Survey". The tax impacts only include state and local taxes paid by individuals. As a result, the tax impact is most likely understated, to the extent that companies providing services on the Great Lakes also pay state and local taxes. However, because these taxes could not be estimated with the same level of defensibility as could personal taxes, the corporate component of state and local taxes has not been included.

6. SUMMARY OF ECONOMIC IMPACTS

The resulting economic impacts are summarized in Exhibit I-2, on the following page. It is to be emphasized that the income, revenue and tax impacts are not additive and measure separate and distinct impacts.

---

[5] Some impact studies have used input/output models to estimate this indirect impact. However, such input/output models are based on very aggregate production and expenditure assumptions which do not accurately reflect expenditure patterns of specific firms in a narrowly defined sector of the nation's economy, i.e., stevedoring firms, towing firms, etc.

Exhibit I-2
Summary of Economic Impacts
Of The Great Lakes/Saint Lawrence Seaway System

IMPACTS	TOTAL SYSTEM
JOBS	
DIRECT	33,716
INDUCED	10,912
TOTAL	44,628
INCOME (1000 DOLLARS)	
DIRECT	$1,050,128
TOTAL	$1,904,308
REVENUE (1000 DOLLARS)	$1,724,883
TAXES (1000 DOLLARS)	$90,756

II. EMPLOYMENT IMPACTS

In this chapter, the employment impacts created by the Great Lakes/Saint Lawrence Seaway System are presented. The employment impacts are analyzed at the total System level, the five business sectors levels and by commodity.

1. TOTAL EMPLOYMENT IMPACTS

In this section, the employment generated during 1991 as a result of port activity at the 16 U.S. Great Lakes ports is estimated. Total maritime activity at these ports created 44,628 direct and induced jobs. Of the 44,628 jobs:

- 33,716 are directly generated by activities of the Great Lakes/Saint Lawrence Seaway System (direct job impact), and if such activities should cease, these jobs would be discontinued over the short term. These are full-time equivalent jobs and include jobs in the five business sectors such as with railroads, trucking firms, longshoremen, terminal operators, freight forwarders, etc.[1]
- 10,912 are employed throughout the Great Lakes region (induced jobs) by providing goods and services to the 33,716 individuals who hold jobs created by port activity on the Great Lakes/Saint Lawrence Seaway System. Consequently, employment in this group is as directly dependent upon port activity as the first group. These induced jobs include jobs involved with the production of consumer goods to supply the demand of those directly employed. Such jobs are in housing construction, retail trade, service industries, and wholesale trade.

The balance of this chapter is dedicated to the direct job impacts of 33,716 jobs.

---

[1] Based on the average number of hours worked annually in each category, the total person-hour impact for that category was converted into full-time equivalent jobs. For example, two workers who are involved with port activity only 50 percent of the year would be counted as only one full-time job.

2. DIRECT EMPLOYMENT IMPACTS

As a result of port activity in 1991, 33,716 full-time jobs were directly created. In this subsection the jobs are analyzed in terms of:

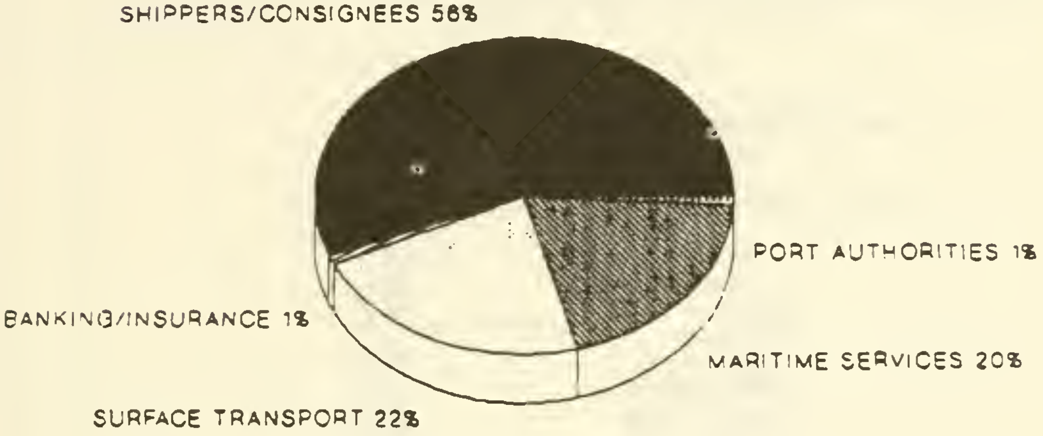
- Distribution by employer sector
- Distribution by commodity group.

2.1 Employment Impact By Economic Sector

Exhibit II-1 presents the distribution of the 33,716 jobs among the following economic sectors:

- Maritime Service Sector
- Transportation Sector
- Port Authorities
- Shippers/Consignees
- Banking and Insurance Sector.

Exhibit II-1
Distribution of Employment Impact
by Economic Sector



The exhibit indicates that the majority of impacts, 56 percent, are created with shippers/consignees directly dependent upon the Great Lakes/Saint Lawrence Seaway for the receipt of raw materials. The majority of these shippers/consignees are steel mills dependent upon the Great Lakes ports for the receipt of such raw materials as iron ore and limestone. Twenty-two percent of the direct jobs are generated with railroads and trucking companies moving the maritime traffic between inland locations and the U.S. Great Lakes ports. Maritime service firms received 20 percent of the direct job impact, while less than one percent of the direct jobs were generated with port authorities and firms in the banking and insurance sector.

Exhibit II-2 shows the job impacts by detailed job category. As this exhibit shows, the largest job impacts, 19,080, are with the shippers/consignees directly dependent upon the Great Lakes for the shipment and receipt of cargo and raw materials. The majority of these jobs are dependent upon inter-lake movements of such commodities as cement, limestone, iron ore, sand and gravel, salt and fertilizers.

Exhibit II-2
Distribution of Employment Impacts
By Detailed Job Category

		TOTAL
SURFACE TRANSPORTATION		
	RAIL	878
	TRUCK	6,688
MARITIME SERVICES		
	TERMINAL OPERATORS	2.969
	LONGSHOREMEN	150
	PILOTS	64
	AGENTS	2
	CHANDLERS	43
	FORWARDERS	97
	WAREHOUSE	225
	GOV'T	123
	SHIP REPAIR	160
	LAKER	2.932
SHIPPERS/CONSIGNEES		19,080
PORT ORGANIZATIONS		
	PORT	302
BANKING/INSURANCE		4
TOTALS		33,718

About 6,700 trucking jobs are generated by maritime activity at the 16 U.S. Great Lakes ports studied, followed by nearly 3,000 jobs with terminal operators. These terminal operator jobs consist of jobs with private cement terminals, grain terminals, bulk terminals, petroleum terminals and stevedoring and terminal operators at public port facilities. In addition, more than 2,900 full time jobs are with U.S. and Canadian laker operators and towing services. Direct job impacts in the other categories are relatively small.

2.2 Employment Impact By Commodity

Most of the 33,716 jobs considered to be generated by port activity can be related to the handling of specific commodities or commodity groups. Certain employment sectors such as marine construction, Federal and local government agencies, and the insurance and banking sectors are extremely difficult to assign to specific commodity groups, and if such an assignment is made, it is often done so arbitrarily. As a result, employment in these job categories and sectors was not allocated to commodity groups.

Exhibit II-3 presents the distribution of the direct employment impacts in terms of the key commodity groups handled by the 16 ports.

Exhibit II-3
Direct Job Impact by Commodity

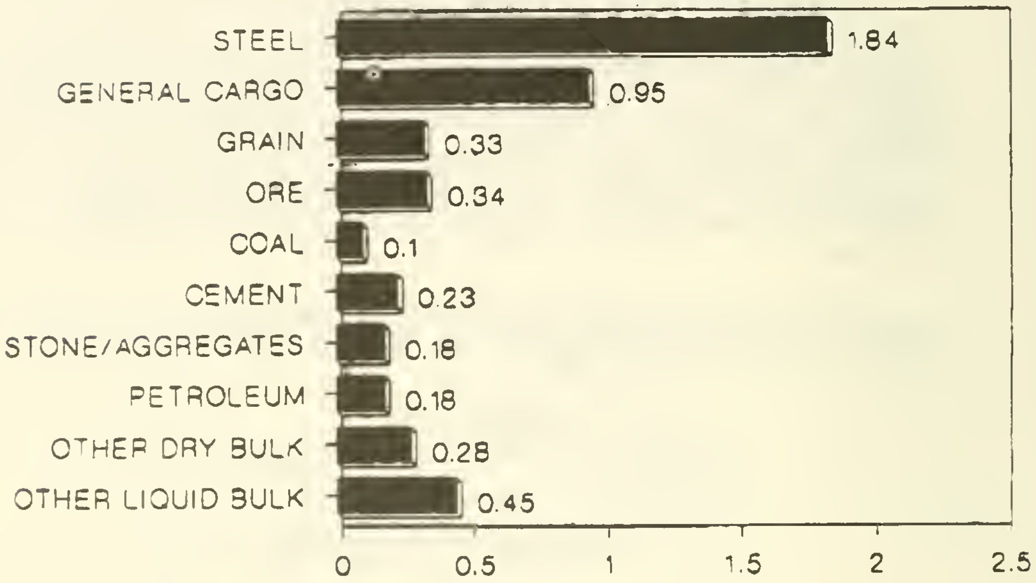
COMMODITY	DIRECT JOBS
STEEL	4,055
GENERAL CARGO	394
GRAIN	1,617
ORE	19.950
COAL	2.272
CEMENT	456
STONE/AGGREGATES	2,441
PETROLEUM	559
OTHER DRY BULK	1,004
OTHER LIQUID BULK	438
TOTAL*	33,186

*EXCLUDES 530 NON-ALLCOATED JOBS

This figure indicates that 60 percent of the direct jobs are generated by ore moving on the Great Lakes for use in the port dependent steel mills located on the Great Lakes. The receipt of steel represents about 12 percent of the direct job impact.

The higher job impact per 1000 tons for break bulk cargoes such as steel and miscellaneous general cargo (a large percentage is machinery and heavy lift cargo) is underscored in Exhibit II-4.

Exhibit II-4
Jobs per 1000 Tons



INCLUDES JOBS WITH STEEL DISTRIBUTION

The fact that break bulk cargo creates relatively high impacts per ton reflects the labor intensive method of handling steel and break bulk cargo compared to the use of self-unloaders which are often used for such bulk commodities as iron ore, coal, salt and limestone. Also, truck rather than rail is primarily used for the inland distribution of steel and break bulk cargoes. Finally, the supporting infrastructure such as forwarders and warehousemen tends to be greater for break bulk cargo and steel than is the case for bulk cargoes.

3. INDUCED JOBS

The regional purchases by the 33,716 direct job holders with the direct income earned from port activity creates additional jobs throughout the Great Lakes Region. In 1991, $1.1 billion was received by those 33,716 directly employed by total Great Lakes and Saint Lawrence Seaway activity at the 16 U.S. Great Lakes ports. As the result of the respending of a portion of this income for purchases in the local port region, an additional 10,912 induced jobs were generated throughout the region.

These induced jobs are estimated based on the current expenditure profile of residents in the metropolitan ares in which each port is located, as estimated by the U.S. Bureau of Labor Statistics, "Consumer Expenditure Survey". This survey indicates the distribution of consumer expenditures over key consumption categories for residents of each key metropolitan area in then U.S. The consumption categories are:

- Housing
- Food at Restaurants
- Food at Home
- Entertainment
- Health Care
- Home Furnishings
- Transportation Equipment and Services

The estimated consumption expenditure generated as a result of the respending impact is distributed across these consumption categories. Associated with each consumption category is the relevant retail and wholesale industry. Jobs to sales ratios in each industry are then computed for each relevant metropolitan area in which the port is located, and induced jobs are estimated for the relevant consumption categories. It is to be emphasized that induced jobs are only estimated at the retail and wholesale level, since these jobs are most likely generated in the Great Lakes Area. Further levels of induced jobs are not estimated since it is not possible to defensibly identify geographically where the subsequent rounds of purchasing occur.

In the next chapter, business revenue, income and tax impacts are presented.

ATTACHMENT 3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 08 1994

REPLY TO THE ATTENTION OF
R-19J

Colonel Walter C. Neitzke
Department of the Army
Buffalo District, Corps of Engineers
1776 Niagara Street
Buffalo, New York 14207-3199

Dear Colonel Neitzke:

We are writing in response to your March 25, 1994 letter to Ms. Carol Browner, Administrator of our Agency, concerning the Toledo Harbor interagency workgroups. In your letter you outlined the issues that seem to be obstacles limiting the success of this workgroup. A large factor in this impasse stems from confusion regarding the definition of the Federal Standard and its relation to State Water Quality Certification. The following is our response to the questions posed in your letter:

Q1: Since Ohio EPA current 401 requirements have determined that open lake disposal of Toledo Harbor sediments will violate U.S. EPA approved water quality standards, does the Federal standard of environmental acceptability follow suit by prohibiting that disposal practice?

A: Our Agency is bound by a State's decision embodied in its "401 certification" regarding the effects upon water quality of any action, including disposal of dredged material. This 401 certification process is a State determination made with specific regard to attainment of applicable Water Quality Standards. The "Federal Standard" referred to in your letter appears to relate to a separate Corps' determination made with regard to funding of dredging and disposal. Our Agency is bound by the State's 401 certification which, in this case, does not allow open lake disposal of dredged material in those instances identified by the State of Ohio.

Q2: Is open lake disposal of Toledo Harbor dredged materials in the Western Basin of Lake Erie inconsistent with 404(b)(1) guidelines since Ohio has determined that the practice violates water quality standards?

A: It is clear from Part 230.10(5)(b) of the 404(b)(1) guidelines that it is the intent of the guidelines to comply with State Water Quality Standards. If, as you indicate, the State has already determined, under Section 401, that the proposed

Printed on Recycled Paper

action will violate Water Quality Standards, and no suitable alternative has been accepted by the State, then the proposed action does not, in our view, comply with the guidelines.

In this circumstance, as discussed in our meeting of March 9, 1994, additional, relevant information, which Ohio EPA has not yet seen, has only recently become available. It is possible, therefore, that the State may yet decide to rescind its previous denial of Section 401 Water Quality Certification based upon a review of this new information, and such a revised disposal plan that the Corps may provide.

Part 230.1(c) of the 404(b)(1) guidelines states that "fundamental to these guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern." Absent the State's decision on 401 certification, the new data tend to support the conclusion that the materials lakeward of Lake Mile 5 could be disposed in the open waters without causing an adverse environmental impact. However, if the State continues to deny certification under Section 401 of the Clean Water Act, the dredged material cannot be disposed in the open waters of Lake Erie.

Q3: Are the current OEPA approved Water Quality Standards more stringent than required by Federal Water Quality Standards?

A: This question is difficult for EPA to respond to because the Federal government does not set water quality standards (except in some very limited circumstances); they are set by states pursuant to requirements set forth in Section 303 of the Clean Water Act.

There is no such thing as a "more" stringent State Water Quality Standard since there is no such thing as a Federal Water Quality Standard, in the specific sense in which you appear to utilize that term in your letter. The term "Federal Standard" is used in your letter in the sense of "Federal Water Quality Criteria." Federal Water Quality Criteria are advisory in nature, and they were developed by our Agency in response to Section 304 of the Clean Water Act which states may use in developing their Water Quality Standards. A State may adopt more stringent water quality criteria as part of its Water Quality Standards pursuant to Section 510 of the Clean Water Act. Since State 401 certification is based on State Water Quality Standards, including water quality criteria, EPA has no authority to object to more stringent State Water Quality Criteria or a certification based on them.

We appreciate the opportunity to present our position on this matter. If you have any additional questions, please contact me or William Franz of my staff at (312) 886-7500.

Sincerely yours,

Michelle D Jordan

for Valdas V. Adamkus
Regional Administrator

PREPARED STATEMENT

OF

JOHN BOWERS

International President
International Longshoremen's Association, AFL-CIO

BEFORE THE

MERCHANT MARINE SUBCOMMITTEE

of the

HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE

on

THE IMPORTANCE OF DREDGING OUR NATION'S PORTS AS IT RELATES TO EFFICIENCIES OF OUR TRANSPORTATION SYSTEMS, PORT COMPETITION AND THE IMPACTS OF NON-DREDGING ON OUR COUNTRY'S NATIONAL AND REGIONAL ECONOMIES

June 16, 1994

Washington, DC

Mr. Chairman and Members of the Subcommittee:

My name is John Bowers. I am the President of the International Longshoremen's Association, AFL-CIO, also known as the "ILA".

The ILA represents approximately 100,000 members engaged in longshoring and related crafts in ports from Maine to Texas on the North Atlantic, South Atlantic and Gulf Coasts of the United States as well as on the Great Lakes and in Canadian ports. Approximately 80,000 of our members are employed on waterfront docks, piers and terminals by stevedores and vessel carriers in a multitude of interrelated crafts and occupations. Their interests are vitally -- indeed, I may say without hesitation, are critically -- affected by the ability of the ports in which they earn their livelihoods to accommodate the modern huge and efficient vessels which transport the cargoes that they service, which is the essence of their trade.

I am certain that the members of this Subcommittee are attuned to the realities that our country's economic well-being is expressed not simply in terms of Gross National Product, but also in the export movements of that product and the imports which affect industrial investments and consumption. It has been estimated that more than 95% of our nation's international trade passes through our ports, including over 66% of the value of our exports. The work of ILA longshoremen is integral to the handling and movements of both import and export cargoes. Their income is derived from their handling of cargoes, which is the principal source of their livelihood. They substantially contribute to our country's self-sufficiency and economy.

However, they are not alone in depending upon this trade for their means of sustenance. An economic impact study by the U.S. Department of Transportation in 1991 showed that commerce generated by the movement of ocean cargo provides employment for one-

and-one-half million Americans who derive approximately $52 billion dollars in personal income which is churned time and again through the local and national economies in the forms of purchases, sales and derivative transactions. Furthermore, the survey indicated that port activities generate $5.3 billion dollars in state and local taxes and $14 billion dollars in federal taxes.

Aside from the obvious economic and statistical aspects of port activities are others that also impact on the nation's interests in very meaningful ways. I, of course, refer to the central role that our ports and the various related facilities contribute in times of international crises, when military operations and foreign aid and assistance require the rapid, broad-based and efficient movements of troops and equipment, as well as food and materiel to locations abroad which no other means of transportation can ever provide in equal means or quantities. These have been reflected most recently during Operation Desert Storm and in the Somali campaign. Unfortunately, the world's political and economic straits far from foreclose the prospect of further expeditions or the needs for economic assistance that must rely on the ability and availability of our nation's ports to timely and efficiently meet them as and when the moment arrives. But it is *sine qua non* that our military terminals must be accessible in order to get the jobs done.

All of the foregoing activities must proceed on a realistic assumption that they can be carried out safely, in terms of navigation and without accidents and impediments. This, of course, means that our harbors are deep enough -- and that the piers that receive our vessels are clear enough -- to accommodate those vessels that come in and out on a daily basis. In order for this to happen, it is absolutely essential that the dredging of all ports which must service commercial and military cargoes be given priority attention by Congress at this particular juncture in our nation's maritime history, precisely because we are at the cross-roads of a major crisis that has developed at an exponential rate because of bureaucratic lethargy and inability to focus upon and to sort out what are claimed to be -- but which, in the final analysis, really are not -- competing or irreconcilable needs and interests. The various government agencies charged with overseeing and implementing legislation and regulations pertaining to the environment, the quality of our air and waters as well as transportation, commerce and the dredging process itself have been unable to get their acts together despite years of testing, talking and testimony. In the process, our ports have been allowed to deteriorate and become irrelevant to the needs of modern commerce. The rippling effects of this process threaten to not only choke off the ports themselves, but, as well, the work, incomes, taxes and economic viability of the regions and national economy that I have described above in very graphic and concrete terms that cannot be ignored by you or by the legislative and executive arms of government.

Let me be specific.

The heavily-laden container vessels that already ply the seas are experiencing considerable difficulty in traversing the Port of New York as well as other ports within the ILA's jurisdiction. This is because they require drafts approximating or exceeding 40 feet in depth. Moreover, container ships over 1000 feet long and carrying as many as 4000 containers are already on the drawing boards and their owners are inquiring as to whether or not those ports will be ready to receive their ships as and when they will be put into service. It has become well-known from ongoing experiences that even the present container and other fully-stocked vessels have had to lighten their loads prior to entering the Port of New York and some other ports as well in order to avoid scraping their bottoms or are unable to tie-up at a pier or to sail from one until high tide because of the amounts of silt and sludge that accumulate each year by the natural movements of the rivers, streams, channels, etc., that flow into the harbor.

Furthermore, certain foreign ocean carriers already have redirected their vessels and cargo to Halifax in Canada which has more than enough depth to accommodate the vessels of the '90's, because the Port Authorities there had the foresight and initiative to properly balance, without governmental proscriptions or excessive interference, to properly balance environmental and other concerns and to do what was necessary and expedient to dredge the port to a realistic depth. Indeed, vessels in the 150,000 dead-weight ton category can call at Quebec, a deepwater port on the St. Lawrence River, with a draft of 51 feet. Though Halifax may not match that depth, it still can handle fully-laden container vessels that will not risk entering the Port of New York/New Jersey or significantly reduce their capacities in the hope of doing so. Meanwhile, those cargoes will be able to enter our country by rail from the North with increasing facility as the links for this traffic are upgraded.

The costs to Americans, including to our union's members, are monumental and must be addressed by Congress. Thus, in the Port of New York alone, where automation has sapped the longshore ranks which in the late 1960's totalled 31,500 members, the jobs of 5,000 remaining active dockworkers, many of whom are minorities and heads of families, with a payroll of in excess $164 million dollars which they annually inject into the local economy, have been jeopardized because of the failure of the Corps of Engineers, under pressure from the Environmental Protection Agency, to issue the necessary permits on time and on a regular basis as applied for at 40-some locations throughout the Port. In turn, there is a tangible, rippling effect on a whole panorama of shipping-related businesses in maritime connected local industries, such as: insurance, banking, trucking, freight-forwarding, warehousing, etc., which directly and indirectly sustain approximately 180,000 jobs throughout the Metropolitan New York/ New Jersey area. These, in turn, generate still billions of dollars more in wages, profits and ever-more-critical state and local taxes that help to fuel our recession-plagued economy.

Though I may tend in this statement to focus on what has been happening and is continuing to happen in the Port of New York-New Jersey, I wish to make it plain to the Subcommittee that the problems, crises, frustrations, inertia and impacts that we in the maritime community have been forced to come to grips with in that Port are not atypical of those that have been or soon will be facing our members on the Northeast, South Atlantic and Gulf Coasts as well as our brethren on the West Coast and which Port Authorities in a number of ports around the country have confronted to date and which we all anticipate in treating with a host of pending and prospective applications for dredging in ports where our members work and support their families. They are your constituents no less than mine. Though I am appearing before you to raise the clarion call and to protect the jobs and livelihoods of longshoremen whom we represent, I must emphasize that the identical premises pertain to all of their counterparts and fellow citizen-wage earners in the Port of New York and elsewhere who you and other members of Congress represent and which you must take into consideration in addressing this issue.

Just to give you some examples of the extent to which the failure to dredge the Port of New York on the members of the shipping community in New York and New Jersey, I note that Maersk Line diverts approximately 200 containers each week to Canada. This translates into a deep-sea labor loss of over 22,000 man hours per year which roughly translates into $600,000. Hapag-Lloyd Lines avoids the Port as a first in-last out Port of Call. Instead, they have rerouted their traffic pattern and topped off with European bound inland discretionary cargo which used to come through the Port. This translates into around 100 containers a week. The vessels of these lines as well as of Sea-Land, Evergreen and ACL are experiencing operational difficulties in reaching their berths.

In March of this year, Hoechst Celanese, a major firm with a presence in the Port of New York for over 40 years, has announced its intention to sell its port facility because it has reached the end of its rope and patience with the agencies charged with monitoring and providing dredging permits. It has been unable since 1986 to secure a dredging permit for its Passaic River ship berth and has concluded that the "seemingly endless stream of additional environmental constraints being placed upon dredging operations" by "the regulatory log jam" will render its efforts to obtain one "prohibitively expensive".

What Hoechst Celanese obviously refers to is the interminable process visited upon public and private applications for dredging permits in the Port of New York. It was only after over three years of tests, entreaties and litigation that the Corps of Engineers finally was effectively compelled to take action and to grant seven of approximately 33 permits still pending in the Port of New York alone. The balance of these permits must await the results of further testing in a conundrum of new, newly considered and revised testing procedures that continue to be imposed and super-imposed upon the applicants even after the initial tests, have been conducted and concluded. What is happening is that constantly new and updated criteria are being developed by the scientific arms of these agencies with an apparent objective of fine-tuning the discovery and evaluation of contaminated matter lying at the bottom of the harbors. This is going on irrespective of the fact that the amounts of such tainted matter has been quantified in terms of "parts-per-trillion," so that the toxic substances contained in the sediment below the waters of New York Harbor, though dispersed over a wide area, are neither concentrated nor significantly accumulated in a manner to constitute an immediate and life-threatening danger, neither to land-based nor to water-borne life. Indeed, it has been pointed out that absent dredging of the harbor and removal of this sediment to out-of-the way locations where it can be deposited and covered-over, the toxic substances are constantly susceptible to being suspended or re-suspended in the water by passing vessels and thus are again exposed to fish and other marine-life.

As far as the absence of dredging pertains to our military readiness in times of mobilizations, I must note that it was reported that the Military Ocean Terminal in Bayonne, New Jersey, a vital link in our nation's logistical support system, was only able to accommodate a single ship at a time during the Gulf War. I believe that that terminal has serviced as many as four ships at a time in the past. I doubt that I could cite a more poignant example of the need for routine dredging as it impacts on our national defense. To the members of the I.L.(ove)A.(merica) Union, who extended their every effort in this great endeavor in handling this cargo, this fact of life in their own port was beyond the ludicrous. It adversely reflected on their own government's failure to meet its basic obligations in the overall defense effort.

Despite the litigation, regardless of the numbers of conferences, colloquiums, surveys, outreach sessions and meetings, it remains a fact of life that the various federal agencies have been unable to coordinate their respective roles and actions so as to streamline the regulatory processes and to issue permits within reasonable and realistic time limits. At the same time, the scope of the problem is so pervasive and the policies of these federal agencies are so extensive and all-encompassing as well as pre-empting and overlapping those of the states, that nothing short of measures applicable to dredging in all ports and waterways will have a salutary effect on the problems being encountered. No matter which way one turns or thinks, it all points in the same direction. There is a growing consensus, even on the part of the forces that advocate environmental causes, that the answer to all our problems is a *national policy* that puts everything in balance and which accommodates the needs and objectives of current legislation, environmental safeguards and economic concerns -- including those of labor, management, shipping and related interests.

Let me make one thing very clear to the members of this Subcommittee. The ILA consists of thousands of human beings and their families who populate not just the New York/New Jersey regional area, but who live in and commute to ports throughout the areas of the country where our members are employed. We and they, no less than those who purport to advance environmental causes, are genuinely concerned over the legitimate and realistic defects of toxic materials in the air that they inhale, in the waters that they fish and swim and in the food and liquids that they consume.

However, what we are urging is a sensible, sensitive, responsive, coordinated and efficiently streamlined procedure for entertaining and processing dredging applications in which those concerns will be brought into balance with economic, maritime, labor and other equally significant concerns, so that the environmental factors can be satisfied within reason without choking off the highways of water-borne commerce that feed and fuel our nation's ports and inland industries and populations. They are a prime key to our Nation's competitiveness in an era of keen rivalry for markets. They are a barometer of gainful employment in every major port and even in many minor ones. Billions of dollars have been invested in container terminal facilities that will simply deteriorate or lie fallow if ships cannot directly and safely come to berth. Hundreds of thousands of manhours -- often irretrievable once lost -- will continue to disappear, in addition to those which already have been lost in the Port of New York to date.

Inasmuch as over 90% of our ports required regular maintenance dredging in order to stay open, in addition to project dredging to accommodate specific present and future needs of ever-larger vessels and their cargoes, I urge the members of this Subcommittee to take the obvious and indicated actions to assure that navigable channels in all of our country's harbors are dredged to the depths that these vessels must have in order to operate at their optimum capacities. Our experience confirms that this requires a legislative mandate to and for the prime government agencies concerned with the dredging process, including, without limitation, the EPA, Commerce, DOT and the Corps of Engineers to coordinate their activities in connection with the processing and approval of dredging applications; to issue regulations and to initiate procedures within clearly defined time limits that cannot be by-passed or circumvented, including those within which reasonable and reasonably-conducted tests will take place without constant updating and revisions; to take into consideration all of the interests and factors, including commercial, labor, environmental, shipping, etc., that will be effected by approving as well by not approving dredging permits; and to weigh the relative costs and effects of these factors on the regions in and about the ports where applications are pending, including the industries and populations that service and are serviced by those ports.

I also urge this Subcommittee to require that the ports where studies regarding the disposition of dredged materials, etc., are taking place be kept open and viable pending final or even interim resolutions of these admittedly difficult problems that may not be capable of quick or inexpensive "fixes". Discussions and studies on this important topic clearly demonstrate that the alternatives available in one port or locality may not be available or cost-effective elsewhere, so that no solution for "all times and places" can be readily prescribed or mandated. This must not, however, mean that everything must come to a halt while a consensus is arrived at in a particular port that is and which can continue to be active while the process of determining the best or most acceptable way of disposing of the sediment continues.

The Subcommittee should recommend reasonable parameters within which these surveys, studies, etc., for testing and disposal are to be conducted, so that we do not have to face even more instances of companies and shipping lines discontinuing their operations and/or authorities and private concerns withdrawing or abandoning their permit applications because of the impossibility of their meeting the criteria set by these agencies to an extent beyond their financial or other means. In the Port of New York/New Jersey, the cost of testing alone by the Port Authority skyrocketed from one million dollars to twelve million dollars by the time that litigation brought about the issuance of permits. These kinds of outlays are unconscionable and can only discourage other potential applicants from going forward with the necessary work to enable them to continue their operations.

Mr. Chairman: On behalf of our members, their families and the industry to which we and they are committed, I implore you and the members of this Subcommittee to give this matter the strong, meaningful and expeditious attention and action that have become absolutely necessary, inasmuch as the normal executive and bureaucratic avenues of approach have proven inadequate and untenable and the bureaucracy plain and simply is unable to recognize and react to the consequences of not permitting maintenance and project dredging to go forward consistent with the state of ocean transportation in the last decade of the Twentieth Century. If this situation should be allowed to continue, it will not stabilize but will only get worse as the silt accumulates and generates even greater and more costly predicaments that in time will be beyond reversal and correction. In the meantime, our members' jobs will disappear along with those in a whole range of related industries as vessels go elsewhere and the local economies continue on a diminishing plane that affect the port cities and all surrounding industrial and residential areas. We cannot afford the luxury of prolonging the ongoing, virtually endless debates and discussions which are leading nowhere except to the point of "too little, too late".

Litigation is not the answer, inasmuch as the courts are no less confounded by inter-agency dilemmas than are the parties themselves. What we need is a clear, lucid, reasonable and effective national policy on dredging that has the backing of Congress and to which it gives unmistakable direction and expediency.

Thank you for this opportunity to address the Subcommittee on a matter of the greatest importance to our union's membership and, I believe, to all concerned Americans.

HSE.LTR\DREDGING.STA

TESTIMONY OF GENE PENTIMONTI, VICE PRESIDENT, GOVERNMENT SERVICES
AMERICAN PRESIDENT LINES
BEFORE THE HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE,
SUBCOMMITTEE ON MERCHANT MARINE
ON BEHALF OF AMERICAN PRESIDENT LINES
JUNE 16, 1994

Good morning, Mr. Chairman and Members of the Subcommittee. My name is Gene Pentimonti, and I am Vice President of Government Services for American President Lines. As you know, American President Lines is the fourth largest liner carrier in the world by volume. We currently operate mainly in the Pacific Rim and the Middle East. Our fleet consists of nineteen (19) large "linehaul" U.S.-flag containerships and a similar number of smaller feederships.

I applaud you for holding this hearing today, and appreciate the opportunity to appear before your subcommittee to discuss an issue that has captured the attention and consternation of the entire maritime community -- dredging -- or perhaps I should say, the lack of dredging. At the outset, let me state that while I am here representing American President Lines and its parent, American President Companies, I would note that a large group of carriers who are very concerned with this issue have endorsed my statement here today. A list of these carriers is attached to my testimony. That's how important this issue is, and how serious the dredging crisis has become.

Mr. Chairman, I know you realize the extent to which the ocean transportation industry, particularly the containerized cargo segment, has undergone tremendous change, and growth, over the past thirty years. The cargo capacity of containerships has steadily grown since the early 1970s, from ships that carried fewer than 1,000 forty-foot containers to today's "new generation" containerships capable of carrying nearly five times that number. Because of the higher cargo volumes and the drive for greater operating efficiencies, there has been a corresponding increase in ship dimensions: length, beam and draft.

In today's very competitive operating environment, owners are driven by the economic principle of economies of scale to build large, efficient ships and lay up the older, smaller, and less cost effective ships. There are essentially two groups of containerships that operate: Panamax and "post" or "non-Panamax". The Panamax ships have beams and lengths that are constrained by the dimensions of the Panama Canal. The ships that fall into this category are all stability-limited and need to carry up to 25% of their deadweight in water ballast, which forces the ship to operate at deeper drafts. With this class of ship, draft represents the only dimension available to the Naval Architect to further expand cargo capacity, since length and beam are restricted by the Canal dimensions. The other class of containerships are referred to as non-Panamax -- ships which have dimensions in excess of Panama Canal limitations. These ships, by virtue of their great capacities, have large length, beam and draft dimensions to support the cargo deadweight. The maximum draft of these ships range from 39-42 feet. In order for these ships to maximize efficiency, the channels and berths at the Ports in which they call must be deeper than the ship's draft when fully loaded. And it's important to remember -- a channel or berth is only as deep as its shallowest point. Without adequate depth, a carrier will need to employ costly and inefficient operating procedures to accommodate the channel depth at a particular port.

Let me give you an example of what I mean. At the Port of Oakland, American President Lines operates at the Middle Harbor Terminal. You just heard from my good friend Charlie Roberts. Charlie and I, and many, many more people, expended a great deal of energy in our effort to get the middle harbor at the Port of Oakland dredged to -38 feet from a depth of approximately -35 feet. This project was ultimately completed in 1992, but only after a cumbersome process which caused a great deal of heartache, and only after time delays caused severe economic losses not only to APL, not just to the Port of Oakland, but to the entire San Francisco Bay Area economy.

In the late 1980s, APL began deploying the new C-10 class ships, which call the Port of Oakland. The C-10s feature a wide-body design that provides both increased container capacity and improved performance. As carriers strive to provide a higher level of service for their customers, large ships like these have become an industry standard.

Further, U.S.-flag carriers have the added dimension of the services provided to the U.S. military. Increasingly, the U.S. military has also moved towards containerization for its logistics requirements. Here too, large, cost-effective modern tonnage is a key to meeting the military's needs.

Yet until the channel deepening project two years ago, Oakland channels severely limited the operations of our C-10s because of the vessels' higher draft. We suffered many economic penalties for calling Oakland. Typically, these ships had to wait for high tides in order to enter or leave the Port, or in attempting to depart, we had to hire additional workers to speed the loading of a vessel, in order to catch the next tide. Further, the ships were not fully loaded with cargo, as even at high tide, the channel depth could not accommodate the draft of this vessel class. And let me remind you that a high tide, while always approximately 12 hours apart, is never at the same time of the day, and varies a great deal in height, depending on the time of year, weather conditions and the lunar cycle. Mr. Chairman, people who live "outside the beltway" often say it appears that what happens in Congress depends on the moon's cycle, and what phase it's in. I assume they're kidding. But literally, the phase of the moon affected our operations. It should be noted, also, that we were not the only ocean carrier affected by the depth problem in Oakland, by far.

Here was our typical capacity constraint in the years prior to the -38 foot dredging: a C-10 has a capacity of approximately 1900 FEU. At low tide, we had to account for a draft of 33 feet; the capacity for one of our ships at this draft is about 1200 FEU, or roughly 700 FEU below the C-10's capacity. On a high tide, we could load for a draft of -37 feet, which meant approximately 1600 FEU capacity -- still well below the ship's full capacity, but obviously better than without the tide. We calculated that one foot of tide translated into approximately 109 FEU. We also estimated that in the year prior to the -38 foot project, we lost approximately 2289 FEU of cargo -- well over one full C-10 capacity of cargo opportunity and millions of dollars in lost revenue.

An important point to bear in mind is that even with the current -38 foot channel depth, this problem still continues for APL, although to a lesser degree, as it does with many other carriers that call Oakland. For this reason, we are all anxiously awaiting the start of the next Oakland deepening project, which will take the channel down to -42 feet.

Oakland is merely one example of a problem of epidemic proportions that now plagues ocean carriers and deep and shallow draft ports throughout the county. APL's experience in Oakland is quite typical of the frustrating and costly experiences that numerous ocean carriers face at ports on all U.S. coasts. As Charlie Roberts indicated earlier, ports on the East Coast, like New York and Boston, currently face a crisis situation. So do many Gulf ports, as do the Great Lakes, which Mr. Loftus discussed. In the northeast, ports are beginning to see carriers reconfigure their services to permit premature discharge of their cargo at Canadian ports, and provide overland transportation via Canada to their U.S. destination. A similar process takes place for U.S. exports, which would be loaded in Canadian ports. The reconfiguration is undertaken to allow the carrier to maximize the vessels' tonnage capacity by calling ports with sufficient channel depth. As a result, in addition to the loss of tonnage at the U.S ports, the ancillary activities suffer, such as warehousing, trucking, and consolidating.

Mr. Chairman, as you and members of this Subcommittee well know, the liner operators are today primarily responsible for carrying the majority of cargo in and out of the U.S. Nearly all liner cargo is containerized. Back in the days when breakbulk cargo was the norm, ships might be at a port for three or four days waiting to be loaded. Not today. A C-10 can be fully loaded in approximately 20 hours. And with today's cost of building modern containerships in the range of $30 - $50 million, shipowners must take advantage of every revenue opportunity, which means a quick turn-around time -- both in and out of a port. So the real "cost" to a carrier of not having sufficient channel depth is the inability to efficiently call or depart a port, with respect to both the loss of tonnage and the operating costs associated with waiting for a high tide, including increased crew and fuel expenses, bunkering etc. For liner operators alone, not including the non-liner and bulk operators, this cost is in the tens of millions of dollars per year. And I would dare say that these costs are passed on to customers, and ultimately consumers. But, there is a greater cost -- a cost to our country's competitiveness. No where else in the world do we see such a protracted and slow process in getting channels dredged, as we do in the United States. No other industrialized port-country would allow their infrastructure to suffer in the manner that we have. I understand the need to adhere to environmental laws and regulations, and no one here today is suggesting that we shouldn't. But within the scope of these environmental laws, we must find a way to dredge our nation's ports in a timely and cost-effective manner. Without the ability to keep up with worldwide market changes, our country will suffer.

Finally, I would echo what Mr. Roberts said earlier -- the dredging problem goes beyond whether there is sufficient channel depth to handle the traffic -- it's also maintaining the channels to keep them at their authorized depths. There are many people in this room today that can speak to this issue better than I, but it is senseless to have an authorized channel depth if the Corps of Engineers cannot, or will not, perform maintenance dredging to keep those channels at their authorized depths. To again use the San Francisco Bay Area as an example, the sedimentation rate is estimated to be approximately 1 foot per year. With the narrow margins that even a -42 foot channel will provide, when I hear one foot per year, Mr. Chairman, I think of 109 FEU, per ship, per call, lost. But perhaps there is no better example of the impact of maintenance dredging than at the Port of New York/New Jersey. On that subject I will defer to Mr. Capo from the New York Shipping Association. However, if there is one point that I can stress to you today, it is this -- the seriousness of the dredging crisis is not just an Oakland or New York problem; it's not just a "port" problem. The carriers and conferences that have endorsed my testimony, and the other panelist from the transportation industry present today all attest to this -- it is indeed a National problem, and a problem that must be solved if the United States' export and import related industries are to remain strong and internationally competitive.

Again, I would like to thank you for the opportunity to appear before you today, and commend this Subcommittee for its focus on this subject. I would be happy to answer any questions.

CARRIERS IN SUPPORT OF AMERICAN PRESIDENT LINES' STATEMENT

A.P. Moller-Maersk Line

Central Gulf Lines, Inc.

Crowley Maritime Corporation

Evergreen Marine Corporation, Ltd.

"Italia" di Navigazione, S.p.A.

Kawasaki Kisen Kaisha, Ltd.

Lykes Bros. Steamship Co.

Matson Navigation Company

Mitsui O.S.K. Lines, Ltd.

Nedlloyd Lines

Neptune Orient Lines, Ltd.

Nippon Yusen Kaisha Line

Orient Overseas Container Line, Inc.

P&O Containers Limited

Sea-Land Service, Inc.

Totem Ocean Services

Wilhelmsen Lines AS

Zim Israel Navigation Company, Ltd.

Additional Questions for the Record answered by Mr. Pentimonti

1) Your company carried defense cargo during the Gulf War. Did your company experience any delays or impediments in the transportation of this cargo due to inadequate harbor depths?

During the time of the Gulf War, our ships leaving the West Coast of the U.S. to all points in the Pacific and Gulf regions were sailing at 100% of our restricted capacity with commercial cargo. As a result, we were experiencing great delays in leaving the Oakland area due to inadequate harbor depths. The addition of the great amounts of cargo we were required to carry for the military (in peak performance an amount equal to 30% of capacity), further stymied our ability to manage ship schedules, again due to restrictions in harbor depths. While we did not turn away any military cargo, we could have kept better schedules and carried more commercial cargo.

2) How exact are the time margins built into "just in time" deliveries, and what is the impact of a carrier's ability to call on a part at a particular time?

The time margins built into the "just in time" service delivery requirement are as tight as 15 minutes. This requires a very timely integration in the hand-off of moving containers from mode to mode, that is from ship to terminal, from terminal to train, and from train to truck. Any interruption in this intricate mechanism can cause huge service impacts.. Clearly being restricted from arriving and operating port at port based on tidal vagaries imposes unacceptable operating constraints on these types of logistics scenarios.

3) What is the cargo carrying capacity of APL's new C-10s? How does the size and capacity of these vessels compare with panamax vessels?

The cargo container capacity of APL's C10 class vessels is approximately 4,400 twenty-foot equivalent units (TEUs). The size of these vessels can be compared to the Panamax vessels employed in similar trades which range from 2,500 TEUs to 3,800 TEUs maximum.

BEFORE THE HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE, SUBCOMMITTEE ON MERCHANT MARINE

Testimony of Jack L. Fields

June 16, 1994

Mr. Chairman and members of the subcommittee, my name is Jack L. Fields. I am Assistant Vice President International Sales and Service for The Atchison, Topeka and Santa Fe Railway Company ("Santa Fe"). My business address is 1700 East Golf Road, Schaumburg, Illinois 60173-5860. I assumed my current position in December, 1992. Prior to that, I was Santa Fe's Assistant Vice President Intermodal Operations from 1989 to 1992. In 1989, I was Division Manager for Santa Fe, which included responsibility for all rail operations in the State of California. In my current position, I am responsible for marketing of Santa Fe intermodal transportation services to international customers.

Intermodal is the movement of highway trailers and highway/steamship containers by rail and at least one other transport mode--truck or steamship. Intermodal service has inherent advantages because it combines the door-to-door convenience of trucks with the high volume, long-haul economies of railroads. Today, intermodal is the fastest growing segment of the railroad industry, and is second only to coal as a source of business. In 1993, railroads moved more than 7 million trailers and containers that otherwise would have increased highway congestion and contributed to more highway accidents. An especially efficient intermodal technology--and one which is commonplace in the handling of international freight--is the double-stacking of containers on a rail flatcar. One stack-train is capable of transporting 280 containers with a train crew of only two. Double-stack trains allow capacity to be increased without a corresponding increase in overall train length. I am very familiar with the international markets in which Santa Fe participates and with the rates and services that Santa Fe provides to compete in these markets.

The purpose of this testimony is to outline Santa Fe's involvement with the ports we serve, and to stress the need for adequate capacity at the ports and the ability of the railroads to move international freight. Santa Fe serves 12 western, midwestern and southwestern states over high speed, high capacity routes between Chicago, the West Coast and the Gulf of Mexico. We take great pride in the high quality of services we provide our customers and our relationships with the ports we serve. On the West Coast, Santa Fe serves directly the Ports of Los Angeles and Long Beach, and serves the Port of Oakland through the Oakland Terminal Railway. Our ability to access the Port of Oakland directly in the most efficient manner has been hampered by limitations in our current trackage rights into Oakland. A reasonable resolution to Santa Fe's current lack of efficient access is viewed as a critical element to the future development of the Port of Oakland.

The focus of this testimony is upon Santa Fe's role with the ports in the handling of international freight, virtually all of which moves in intermodal container service--the movement of containers on railroad flatcars which are received from or delivered to ocean carriers at the ports. Santa Fe is a major actor in the movement of international freight. In 1993, Santa Fe handled over 365,000 containers of international business, which constituted 30% of all intermodal units shipped on Santa Fe. Santa Fe has experienced a tremendous growth rate in international container traffic of approximately 14-15% per year over the last two years. According to most West Coast port estimates, volume is projected to grow at a 5% annual rate over the next five years. With the rapid growth of the Peoples Republic of

China and Southeast Asia, these estimates may be on the low side.

Santa Fe's relationship with the ports we serve can best be described as a partnership. On international freight movements, Santa Fe provides the inland portion of transportation that begins or ends abroad, and which must flow through the ports for transfer between ocean vessels and rail cars. We recognize the importance of our relationship with the port authorities, and that only by working together cooperatively can the ports and the inland transportation companies efficiently move the volumes of freight today and projected in the future.

Manufacturing production in Asia is shifting from the northeast to the southeast, with the Peoples Republic of China gross domestic product increasing in double digit ratios. The most favored nations policy recently issued by the Clinton administration clearly facilitates continued extraordinary growth in production as well as consumption by mainland China. Chinese import opportunities have been greatly enhanced, and there are also longer term export opportunities inherent to the improving wealth of the Chinese people.

I recently took a trip through Japan, Singapore, Hong Kong, Taiwan, PRC, and South Korea on behalf of Santa Fe to call upon steamship companies, manufacturing companies and the Chinese Ministry of Railways. Universal interest was evident there in specific West Coast port and infrastructure initiatives. Specific areas of interest were the Port of Oakland dredging project and proposed Joint Intermodal Terminal, the Southern California Consolidated Rail Corridor, and the proposed on-dock and near-dock infrastructure improvements in Southern California. The Asian shipping companies and manufacturers alike are quite concerned about inland transportation (i.e., railroad) and capital expansion projects associated with capacity improvements. Will the railroads be able to handle their freight? Among the more obvious concerns was the railroads' experience of the 1993 Midwest floods and the trucking industry strike sustained in November, 1993.

The completion of dredging projects, such as the 42-foot program at the Port of Oakland, is essential to international transportation. Ocean carriers have already announced the coming of larger, deeper draft vessels. Vessel slot (container) capacity will increase significantly world-wide over the next two years. For the most part, these new ships are Post Panamax, implying that their capacity will be used for inland U.S. transport. Likewise, the proposed Port of Oakland Joint Intermodal Terminal represents an infrastructure project necessary to satisfy the demand for increased efficiencies that is being placed upon the entire international transportation network. Competitive rail access is imperative at all major ports, in order to provide optimum utilization of existing rail infrastructures and routing options.

The Southern California Consolidated Rail Corridor is a good example of carefully planned, long term infrastructure support for anticipated growth in the international marketplace. This project recognizes and is consistent with the need for competitive rail alternatives, community concerns, and the environment. The additional on-dock and near-dock infrastructure plans by the California ports clearly embrace the needs of shippers, shipping companies, and the public at large.

The throughput capacities of the ports and the supporting railroad infrastructures are essential elements in facilitating world economic growth, because of the critical role that the international transportation system plays in world economic growth. The importance of port capacity is well recognized in Asian communities, particularly in Singapore where plans are underway to triple port throughput potential from the present 10 million TEU's to a planned 30 million TEU's. From a global perspective, this is significant due to Singapore's geographically strategic location as a crossroad point for international freight aggregation and transfer.

Santa Fe's primary route structure extends the length of California, from the Bay Area to Los Angeles, inland to Kansas City, St. Louis and Chicago. Chicago represents, by far, the largest transportation hub and distribution point for American railroads. The cooperation between eastern and western railroads in the interchanging of international (and all other) freight through the Chicago hub is exceptional. With international intermodal traffic volumes on the railroads skyrocketing, the ability of the railroads to continue the efficient throughput of this freight at Chicago is of major importance.

Santa Fe has undertaken and continues to undertake major efforts to maintain and improve our rail infrastructure and capacity to handle intermodal traffic. Santa Fe has 19 major intermodal hubs, and between 1991 and 1993 invested over $67 million in intermodal terminal improvements and expansions to accommodate additional container traffic. Santa Fe's intermodal facility at Chicago is the busiest such facility in the United States. In 1993, an average of 25.3 intermodal trains arrived or departed each day, approximately 793,595 trailers and containers were inspected and an average of 2.5 units are loaded or unloaded every minute. In addition, we are raising clearances on Tehachapi mountain tunnels to open new northern California markets and the Port of Oakland to full double-stack service, and are double tracking 22 miles of transcontinental main line track in Kansas and New Mexico to accommodate increased traffic. The addition of 1,300 new 48-foot containers will bring

Santa Fe's container and trailer fleet to approximately 10,000--one of the railroad industry's largest.

In this testimony, I have attempted to outline the importance of Santa Fe's relationship with the ports in the efficient handling of international freight, and to identify capacity improvements that have been undertaken by Santa Fe and the ports to improve the efficiency of the international transportation system in light of the increasing demands being placed on that system. In closing, I want to re-emphasize the importance of adequate dredging at the ports. Without such dredging, no matter what other efficiency gains are accomplished by the railroads and ports, the transportation system will simply not be able to handle projected volumes of international freight, especially as the new, higher capacity vessels come on line.

Thank you for the opportunity to present this testimony.

STATEMENT OF
JAMES A. CAPO
PRESIDENT
NEW YORK SHIPPING ASSOCIATION, INC.

TO THE
HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE
MERCHANT MARINE SUBCOMMITTEE

JUNE 16, 1994

My name is James A. Capo. I am President of the New York Shipping Association, Inc., which represents the 75 ocean carriers, marine-terminal operators and other companies that employ longshore labor in the Port of New York & New Jersey.

Thank you for the opportunity to testify today on the dredging crisis -- for, make no mistake, the dredging situation _is_ a crisis. America's ports are under attack from their own federal government. And unless the government comes to its senses, America will face severe difficulty making any headway in the global economy. It will, however, run headlong into unexpected environmental problems.

The Overlooked Key

International trade has been a popular subject in recent years. Washington and the rest of the country have been abuzz in terms like "GATT" and "NAFTA". Pundits and economists have spoken warmly of the economic opportunity that the world's markets offer America. National and state leaders have urged business to explore export opportunities. States and regions have set up overseas marketing offices and tried to outdo each other in coming up with incentives to attract foreign manufacturers to this country.

But a pivotal element of the trade process has gone unmentioned and apparently unnoticed during all of this optimistic discussion. To send American products overseas, and to receive products from the rest of the world in return, you need seaports. Ninety-five percent of the world's trade moves in ships, the most economical and energy-efficient mode of transportation there is. And ships need places where they can load and unload the products they carry.

Unfortunately, under current policies, these intermodal gateways to the world economy are not being promoted or even preserved. In fact, they're being throttled by an incredibly myopic federal bureaucracy that can't see the tree for the leaves, much less the forest for the trees.

Perhaps this sounds too extreme to be plausible. Perhaps it sounds like exaggeration, alarmism, or even fantasy. Reasonable people naturally tend assume that it would be irrational for any government to pursue a blatantly self-destructive course; therefore they assume their government would not pursue this particular self-destructive course.

Unfortunately, reason and sense have gone out the window on the dredging issue. I am describing reality -- irrational and illogical reality, but reality nonetheless.

The $20-Billion Port

I speak from experience. In the New York/New Jersey region, we in the port and shipping community have found ourselves trapped hopelessly in what I can only describe as an administrative version of Alice's wonderland. Up is down, down is up, small is big, big is small, and people concentrate on outlandish minutiae while major issues threaten them.

The Port of New York & New Jersey long has been a major asset to its region and to the nation:

- It is one of America's three biggest seaports.
- It generates $20 billion a year in economic activity, including nearly $400 million in state and local taxes.
- It is responsible directly and indirectly for 180,000 jobs.
- It is a funnel for consumer goods -- everything from coffee to cars to clothes, from petroleum to plastics to paper -- for its region's 15 million consumers and, through intermodal service, for tens of millions of Americans in the Midwest.
- It is a pipeline for exports of every kind.
- It is home to a major military supply depot, and a key naval ordnance facility.

However, like many other maritime centers, New York/New Jersey is a river port. The natural depth of its harbors is about 18 feet, less than half what is needed to accommodate modern ships.

In order for our Port to function, its channels and berths must be dredged. Then they must be periodically re-dredged to clear them of the silt and mud that is continuously deposited by the rivers. This has been the case for scores and scores of years.

And to dredge, you must be able to dispose of the dredged material. For 80 years, our primary disposal location -- and today our only authorized disposal location -- has been an ocean site six miles off the New Jersey coast known as the Mud Dump. After 80 years of receiving dredged materials, the site is far from a nautical wasteland. In fact, it is a fine fishing area.

Dredging is actually a matter of logic dictated by simple physics. If the Port of New York & New Jersey is not dredged, it will become too shallow to accommodate ships safely and efficiently; if it cannot accommodate ships safely and efficiently, it risks both shipping disasters and progressive abandonment by ships; if ships abandon the Port of New York & New Jersey, it will not generate economic activity, or taxes, or jobs and will be unable to serve as a conduit for exports and imports.

Exporting and importing will continue, of course; a port's problems will not affect consumer demand. But the products will have move through other ports, requiring additional transportation and added costs in consumer price, in energy consumption, in pollution, and in competitiveness.

Bureaucratic Debate and Inaction

All of this has mattered little, if at all, to the federal agencies that oversee dredging. Instead, they have concentrated intently on what they viewed as more important things.

They have debated at length among themselves the requirements and procedures and protocols for dredging permits. They have debated at length the standards for disposal of dredged material. They have changed and re-changed those standards, requirements, procedures and protocols.

They have argued whether the acceptable level of dioxin traces in dredged material under consideration for ocean disposal should be 25 parts of dioxin for every 1 trillion parts of mud, or 10 parts of dioxin for every 1 trillion parts of mud.

They have devoted much time, effort and concern to investigating topics like why the one-tenth-of-an-inch-long amphipod creatures they insist on using for a significant test keep dying before the test can be conducted.

They have pondered over why and whether a dredging permit that was delayed for three years by their inaction should be amended to allow dredging of the additional silt that accumulated during the three-year delay.

About the only thing the agencies have firmly agreed upon is to subject the New York/New Jersey region to different -- and stricter -- dredging-permit standards than they use in any other region.

These administrative policies turned a routine six-month,

$1-million project to clean silt out of ship berths at Port Newark and Elizabeth into a three-year, $17-million nightmare. They have halted virtually all other dredging in our region (with the exception of seven permits that were just issued after the agencies finally dropped a requirement that they had agreed for a full year was irrelevant).

And ironically, while the government is holding the port community to strict standards over dioxin and other issues, it has yet to clean up a Superfund site that is believed to be the major source of dioxin pollution -- an Agent Orange plant that was shut down some 20 years ago.

How Many Amphipods Can Dance on Head of a Pin?

The federal agencies responsible for dredging and disposal have moved in this manner in the name of environmental considerations. And I do not doubt that they have acted with the very noblest of intentions.

Unfortunately, as the bureaucracy has debated how many amphipods can dance on the head of a pin, it has ignored important economic and environmental issues that affect real people. For example, it has not given serious, if any, consideration to the following consequences of allowing New York/New Jersey to become too shallow:

- The immediate economic danger to our Port businesses and workers, as well as the businesses and workers that depend on their patronage.
- The long-term economic harm from shutting off the region's gateway to world markets.

- The environmental risks of ship collisions and oil spills.
- The air pollution from the additional truck trips -- up to 1 million per year -- that will be required to haul to and from other seaports the goods that now move through the New York/New Jersey Port.
- The additional energy costs from making trucks a significantly bigger part of the region's transportation network.
- The additional consumer costs from increasing transportation requirements for consumer goods and oil.
- The additional cost and competitive burden the area's industries will face in transporting their products to more-distant ports for export.
- The impact on national defense of allowing a major military supply terminal (the Military Ocean Terminal at Bayonne, N.J.) and a key ordnance facility (the Naval Weapons Station at Earle, N.J.) to be closed down because they cannot accommodate ships.

To put it another way, there are more things in heaven and earth -- and the American economy and environment -- than are dreamt of in the philosophy of the federal bureaucracy.

Safety Danger Real

The dredging issue's danger to ship and harbor safety is real. In order to float high enough in the water to reach their docks, many tankers now must engage in a process called lightering. This means that they must anchor and pump product out into small barges that are known as lighters.

The personnel who conduct such operations are skilled and extremely cautious. But the more often that such operations must be conducted, the more opportunity there is for a problem.

We already weathered one problem at the Port several weeks ago. A tanker that was in an anchorage because it had to lighter was struck by a freighter in a dense fog. There was heavy damage to the steering gear of the tanker, but fortunately there was no spill.

The exact details of the incident are under investigation by the Coast Guard. But the fact is that the tanker's terminal is one of the facilities whose dredging permit has been held up by the federal bureaucracy.

And the fear is that this won't be the last such episode.

Helping a Competitor

The three-year delay in dredging silt out of berths at Port Newark and Elizabeth hurt the Port of New York & New Jersey economically. Berths simply became dangerously shallow.

Ships -- which cost $50,000 a day to operate -- often had to wait up to 12 hours for high tide to allow them to dock or undock. They had to offload containers at competing ports in order to float high enough in the water to reach their berths. They had to leave containers on our docks in order to float high enough to leave. Our longshoremen alone lost 300,000 manhours of work last year -- that's over $6 million worth of wages.

Even more alarming over the long run is the fact that the Port of New York & New Jersey lost competitively. Because intermodal technology and deregulation have made it easy to divert cargo, seaports today compete as fiercely as any economic entities compete anywhere. As New York/New Jersey becomes known for its increasing difficulty in handling ships, shipping lines -- sooner, rather than later -- will move to other ports. Like Baltimore. Like Hampton Roads, Va. Like Halifax, Canada.

Meanwhile, all of us ports in the northeastern United States are going to be adversely affected by Washington in another way. The same federal government that won't allow us to keep our harbors navigable has given its stamp of approval to a modern, double-stack railroad tunnel now under construction by Canada's government railroad between Port Huron, Michigan and Sarnia, Ontario. This facility, called the St. Clair Tunnel, is the missing link in a railroad superhighway between the Canadian port of Halifax and the American heartland.

When it opens early next year, the St. Clair Tunnel will give the Port of Halifax a clear competitive advantage over the Port of New York & New Jersey and other northeastern American ports for Midwestern cargo. At the same time, our federal government's refusal to allow us to dredge will only magnify Halifax's other major competitive advantage, which is a very deep harbor.

This amounts to a deadly one-two punch against our Port by its own federal government.

Conclusion

We sincerely appreciate the Committee's concern about this critical but overlooked subject. Action on dredging is long overdue.

The United States must have modern, usable seaports if it is to be able to maintain world trade and a world-class economy. That means it must be able to dredge its seaports. And to dredge its seaports, it must be able to dispose of the dredged material.

Unfortunately, the United States has no comprehensive policy toward, and little cognizance of, its seaports. Moreover, it has allowed a dangerously narrow and short-sighted environmental policy to dominate all consideration of dredging and disposal, an issue that is fundamental to the operation of seaports.

What is needed? Long-term alternatives for the disposal of dredged material will be needed. No one argues that.

However, dredging and disposal cannot stop while such alternatives are sought. They must be able to continue. Even if the search is conducted at full speed in good faith, it will take years to complete. We cannot just close down in the meantime.

For the Port of New York & New Jersey, this means that the Mud Dump must remain open during the search for alternatives. (Historically, more than 90 percent of the material dredged from our harbor has been suitable for disposal at the Mud Dump.)

If the Mud Dump does not remain open and usable, the Port will be unable to keep itself navigable. And if the Port cannot keep itself navigable, the economic and environmental costs will manifest themselves quickly, increasingly, and in ever-more painful degrees.

Thank you.

###

HALIFAX PORT TONNAGE ON THE RISE

MERVYN C. RUSSELL
Chairman

Cargo tonnage moving through the Port of Halifax increased in 1993. The increase was modest, but does indicate a positive trend. The economic recovery has sparked increases in specific cargo areas, which have buoyed overall Port traffic.

Cooperation

The Halifax Port community rallied against strong competitive pressures from US port and rail systems by increasing cooperation among Halifax's operating partners. Terminal operators, labour, rail and port management worked in unison to improve port services, expand cargo volumes and cut costs.

In 1993 Halifax's rail partner, CN North America, expanded double-stack operations, and introduced advanced reefer equipment for coast to coast movements. CN completed construction of its $17 million Halifax Intermodal Terminal, and will complete the Port Huron to Sarnia double-stack tunnel in early 1995, improving efficiency and access to the U.S. midwest for shipping lines calling at the Port.

The four main port labour locals, and the pilots, have all committed to long-term agreements. Halifax's labour reflects an environment of stability and efficiency, and is a key factor in maintaining a cost-competitive environment.

EDIPORT Atlantic Inc., the Port of Halifax's electronic data interchange system, made progress in many areas in 1993, including the computerization of document flows in four areas: intervention; port facilities; commercial release; and intermodal. The Port's EDI system is one of the most comprehensive in North America, and has already resulted in lower costs and improved efficiency for all port partners and customers.

Tariff Freeze

The Halifax Port Corporation anticipates continued growth in 1994, and has frozen all of its major tariffs for the fourth consecutive year to help achieve that objective.

Wharfage and Berthage have been frozen since April 1990, and Harbour Dues have been kept at the same rate since July 1989. There are no scheduled increased in Wharfage, Berthage or Harbour Dues for 1994.

The Port Corporation has been able to maintain current tariffs due to a series of rigid cost-cutting measures. The move to maintain rates was taken because customers are just beginning to recover from several years of recession.

Holding tariffs at 1989/90 levels will give the Port's carriers additional encouragement, thereby enhancing the competitive position of the Port.

Cargo

The Port moved more than 14 million tonnes of cargo in 1993, of which 80% was bulk, 18% or 2.5 million tonnes was containerized, and the remaining 2% was non-containerized general cargo. Overall tonnage was up 1%. Gross revenue for the Port Corporation, at $11 million, was comparable to 1992.

Compared to 1992 statistics, the Port's fastest growing cargoes are containers, especially inbound, which grew at a rate of 18%, and inbound breakbulk cargoes, which are up 14%. All types of outbound bulk increased over the last year: grain volumes tripled, and total outbound bulk increased by 4%.

DAVID F. BELLEFONTAINE
President and
Chief Executive Officer

The 2.5 million tonnes of containerized cargo was moved through the Port in 184,002 containers, or 300,933 twenty-foot equivalent units (TEUs). Domestic container movements accounted for 10% of the volume, and foreign movements accounted for 90%. In Halifax, container movements are well balanced: 52% of all containers are inbound, and 48% are outbound.

There were 1624 vessel arrivals in Port in 1993, down by 5% from the 1711 arrivals in 1992. The average vessel size in 1993 was 19,203 gross registered tonnes (GRTs), up by 3% from 1992. Over the last ten years vessel size has doubled at the Port of Halifax.

Cruise

In 1993, passenger traffic increased to 31,000 passengers carried on 47 vessels.

Carnival Cruise Line recently announced that it will kick off the inaugural season of its new superliner **Fascination** on a northeast cruise stopping at Halifax.

Recent promotional activities for the 'New Atlantic Frontier' cruise route appear to be paying dividends. The increasing popularity of this cruise route is reflected in the steady growth of vessel calls over the last ten years, as well as in heavy early bookings for the 1994 season.

Nine cruise lines have already requested berth assignments in Halifax beginning in early June and carrying through until late October 1994. Up to 40,000 passengers are expected.

The Carnival announcement

(Continued on Page 150)

Shipping Federation

Continued from Page 17

identifying those areas in which duplication can be eliminated and costs can be reduced. Once this investigation has been completed, the Executive Council, along with the three District Committees, will begin formulating a more specific strategy for dealing with this issue. By that time, more concrete details about the government's policy should be available.

ICE NAVIGATION

The Federation undertook a number of measures to strengthen its ice advisors programs in 1993. For example, discussions were initiated with the Coast Guard on the subject of making the presence of an ice advisor a mandatory requirement for all tankers and chemical carriers to which the JIGs apply. In addition, all ships entering the Gulf of St. Lawrence are now required to inform ECAREG of their intentions with respect to engaging the services of an ice advisor. The Federation and the Coast Guard are also examining the feasibility of developing a certificate endorsement program for ice advisors, and this subject will be on the agenda at the next round of CMAC (Coast Guard Marine Advisory Council) meetings.

INTERNAITONAL MARITIME ORGANIZATION'S MARINE ENVIRONMENTAL PROTECTION COMMITTEE

The Federation became more involved with the International Maritime Organization (IMO) during the year due to its participation in the work of the IMO's Marine Environmental Protection Committee (MEPC). MEPC deals with issues related to the prevention of maritime pollution, and is comprised of representatives from the majority of flag states, as well as BIMCO, the International Chamber of Shipping, Intertanko and Intercargo.

As a member of the Canadian delegation to MEPC, the Federation's Manager of Marine Operations was involved in a number of important issues during the year. These included the development of an IMO resolution to implement voluntary ballast water exchange guidelines similar to those used in Canada, and efforts to ensure that Canada's approach to maritime pollution prevention is compatible with the aims and objectives of the international community. He was also active in the committee's efforts to implement an IMO resolution calling for segregated ballast spaces on tankers to be exempted from the assessment of port dues and pilotage charges, which resulted in the Canadian Coast Guard's agreement to honour the new international tonnage certificates created for this purpose.

Port of Halifax

Continued from Page 35

heralds what will, by all accounts, be an excellent cruise season in Halifax.

Cruise passengers say Halifax is one of their favourite ports of call. Why? Because the people are friendly and the city is clean.

Results of a 1993 Port of Halifax survey indicated that passengers on cruise ships visiting the Port last year were overwhelmingly positive about their experience. They especially enjoyed motorcoach tours, walking, shopping and visiting museums, historic sites and galleries. Over 92% of the survey respondents said they would visit Halifax again.

Halifax gets top billing by passengers on the rapidly growing New Atlantic Frontier cruise route. Quebec City and Bar Harbour also rated very high.

Facilities and Services

The Halifax Port Corporation has decided that the timing is right to make some improvements to the facilities where most cruise ships choose to dock, the Seawall. Last year the Port painted a series of nautical flags on the Seawall spelling out 'Welcome to Halifax'. This year the Corporation is making more aesthetic changes, with landscaping and decorative items, and is also making some operational improvements, by paving the brow and installing a bus ramp to improve traffic flow.

The Port is continually improving operational and security systems.

In 1993 the Halifax Detachment of Ports Canada Police developed a program called "Portwatch", similar in scope and format to the community based residential policing program called "Neighbourhood Watch".

A new efficient gateway complex is currently under construction at the Pier C Container Terminal.

Over the past ten years, the Halifax Port Corporation has spent $38 million to upgrade its facilities and improve its operational efficiency.

BERMAR SHIPPING AGENCY INC.

For the smooth selling and sailing operation
SHIPPING AGENTS SALES & MARKETING

MONTREAL OFFICE:
Bermar Shipping Agency Inc.
Suite 504, 430 Ste-Hélène
Montreal, Quebec H2Y 2K7
Tel.: (514) 499-1588
Fax: (514) 499-1328

TORONTO OFFICE.
Bermar Shipping Agency Inc.
Unit 12
1020 Brevik Place
Mississauga, Ontario L4W 4N7
Tel: (416) 238-0598
Fax: (416) 238-5641

CN UPBEAT ABOUT INTERMODAL'S CONTINUED GROWTH

PAUL M. TELLIER
President &
Chief Executive Officer

Intermodal continues to be the fastest growing business of CN North America and is spurring investments in new facilities and technology to meet demand. The railway's total intermodal volumes soared by 18% in 1993 to total 572,000 units. And this year's performance should be even better.

Import-export container traffic represents an important chunk of that traffic and growth pattern. For example, last year the overseas container business reflected the same increase as intermodal as a whole-18%-and should enjoy similar gains this year.

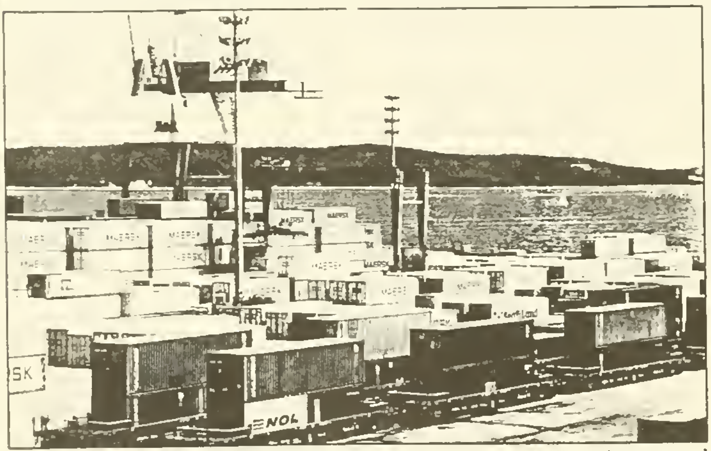
On the East Coast, CN's container volumes at Halifax have picked up steadily over the past two years, and is about 10% ahead of last year's volumes for the first quarter of this year.

Recent announcements by Leif Hoegh to increase their calls to Halifax and by P&O and Sea-Land Ships to upgrade their joint service with Maersk Line from bi-weekly to weekly represent good news for all stakeholders in the Port.

With the opening of a new intermodal terminal in Halifax late last year, CN has extended its doublestack Laser service to overseas container traffic as well as to domestic business. And its Laser trains provide second morning delivery to Central Canada and third morning delivery to Chicago.

When the new tunnel between Sarnia and Port Huron opens next year, CN will be even better positioned to handle Halifax's business to Chicago and beyond. The company is also pleased to see that its commitment to improving service in this corridor is shared by the labor unions and the Halifax Port Corporation.

In March, the Port's labour unions agreed to reduce cargo assessments for containers moving to/from the mid-west, effective upon the opening of the tunnel. The Halifax Port Corporation continues its own incentives for all U.S. cargoes, which effectively reduce wharfage charges for these cargoes by 98%.



CN North America's import-export container traffic has increased by 18 per cent since last year, and that kind of growth is expected to continue in 1994.

CLIFF CARSON
General Manager
Overseas International
Market Intermodal

The St. Clair Tunnel

When CN finishes building its new $190 million tunnel under the St. Clair River between Sarnia, Ontario and Port Huron, Michigan in spring, 1995, the railway and its intermodal customers will enjoy the benefits of doublestack service between Canada and the United States, as well as across Canada.

Upon completion, the new tunnel will streamline the annual flow of some 275,000 freight cars, including multi-level auto carriers and five-paks hauling two 9'6" high containers double stacked. It will also enable the railway to offer 56 hour transit times between Halifax and Chicago.

During construction of the tunnel, service is being maintained by the existing century-old river tunnel there, barge movements across the St. Clair River, and the Detroit River Railroad Tunnel.

In conjunction with the completion of the tunnel, and the sharply higher container volumes associated with its opening, CN is investing $16 million to expand its 195-acre intermodal terminal in Brampton, On-

(Continued on Page 158)

Canadian Board of Marine Underwriters

Continued from Page 145

ing is another area for which we, as marine underwriters, can lobby. Although the Canadian fleet finds it difficult to compete on a world level with basic marine technology, there are some specialized areas which we can explore. Vessels designed for Arctic shipping and carrying forestry products come to mind. Innovations, such as self-unloading lakers which take on iron ore, loading it onto ocean-going ships in a time efficient and seamless operation, are needed in increasing numbers.

Marine shipping will always be an essential part of Canada's trade. It is still the economical and environmentally safe mode of transport, particularly for such important export commodities as grain.

But unless we continue to lobby government about the viability of our domestic fleet, we could end up with no Canadian ships. The implications — using foreign ships which may not be up to our safety and environmental standards, export goods that will be less competitive on the world market, and ultimately, fewer jobs in Canada.

With the cooperation of the shipping industry, marine underwriters, shippers, government and our highly skilled technical workers, we should be able to develop methods to compete effectively and profitably.

CN

Continued from Page 63

tario. This terminal is the key gateway for rail traffic between Halifax and Chicago.

On the West Coast, traffic volumes at the Port of Vancouver were up 15% in 1993, but the longshoremen's strike there earlier this year adversely affected first quarter volumes. However, CN anticipates an improvement in market conditions on the West Coast, and expects to handle similar volumes as it did last year.

To help increase business for temperature sensitive traffic on both coasts, the railway is adding 10 additional generator sets to bring its fleet total to 50. Each generator set maintains temperature control on up to 12 containers on a five-pak. This traffic has become a very important niche market for the company, and the generator sets reflect its commitment to serving it.

Exploiting Technology

While CN continues to invest in terminals and equipment to keep pace with growth, it also recognizes the important contribution that computer technology offers. That's why it is spending $100 million in information systems to help turn its freight operations into a scheduled service, just like the airlines.

Implementation is under way, and will be completed by mid-1995. Since deregulation, 75 per cent of CN's business is under confidential contract and must respond to a multiplicity of service and information needs.

This radical configuration of CN's information systems gives employees field-level control over the managing and monitoring of individual customers' shipments. More than 8,000 CN employees will be trained in its use.

The investments being made in CN's workforce, technology and facilities will help the railway provide better service to its customers — now and in the years ahead.

MONTREAL
(514) 849-2221

FAX: (514) 849-7231

24 HOURS
(514) 849-5511

McALLISTER
TOWING — SALVAGE
BARGE TRANSPORTATION — DIVING

ADDITIONAL QUESTION FOR THE RECORD
FOR MR. CAPO

(1) How serious is the problem of cargo diversion into Canadian ports due to insufficient channel depths at ports in the northern United States?

Very serious. It exists, it will grow worse unless the dredging crisis is resolved, and it will be compounded exponentially by a new railroad tunnel -- being built with Washington's endorsement -- that will provide a rail superhighway between Halifax, Canada and the American heartland.

And once a port loses business, it is extremely difficult to regain that business.

Cargo already has been diverted to Canadian ports because of inadequate channel and berth depths at U.S. North Atlantic ports. For example, an expedient interim way for ship lines to cope with steadily shoaling berths at New York/New Jersey last year -- the third year a dredging permit remained in limbo -- was to lighten up by discharging part of their NY/NJ-bound containers in Canada. Indeed, a major Danish line publicly re-designated Halifax, Nova Scotia as its prime East Coast deepwater port, taking that designation away from Port Newark. Although our berths have since been dredged, not all of our cargo has returned.

Diversions to Canada will only increase if the U.S. government continues to make it difficult and/or impossible for U.S. ports to keep themselves navigable. Canada's Eastern ports, especially Halifax, are close to U.S. North Atlantic ports, and are physically and commercially competitive. They want business, and the Canadian government does not stand in their way.

In fact, the Canadian government has provided a compelling added argument for diversions by building for its national railroad a state-of-the-art route from East Coast Canada into the American heartland -- a project that will be climaxed early next year with the opening of the St. Clair tunnel that the U.S. government has endorsed. We are stunned that, with one hand, Washington is promoting a project that will hurt us, while, with the other, it prevents us from keeping ourselves competitive.

James A. Capo, President
New York Shipping Association, Inc.

Statement of
Mark D. Sickles
Executive Director
Dredging Contractors of America
before the
Subcommittee on Merchant Marine
Merchant Marine and Fisheries Committee
June 16, 1994

Good morning. My name is Mark Sickles. I am Executive Director of the Dredging Contractors of America. DCA was founded last year in a merger of the small business dredging association and my former employer the National Association of Dredging Contractors. DCA's members perform more than 80 percent of the Corps of Engineers' contract dredging and 100 percent of the private hopper dredge workload.

DCA strongly endorses the American Association of Port Authorities' call for a National Dredging Policy. At the root of the regulatory gridlock we face is a divided federal family. A formal acknowledgement of the importance of our ports to the national economy at the highest level is a fundamental starting point in beginning to break this gridlock.

The dredging industry works at the tail end of a port's or Corps' project formulation and permitting process. From our perspective, the future is not bright. Endless studies, analyses and the lack of a definitive, rational decision-making process is contributing to the slow destruction of our industry. The dredging business is very capital intensive. Last year, the third largest company in the industry was forced out of business. Three years ago, the second largest company on the West Coast met a similar fate. Unemployment within the ranks of our highly skilled and uniquely trained work force is unacceptable. Due to the poor U.S. market conditions, dredging companies have been forced to be more aggressive in seeking overseas work.

In addition to the regulatory gridlock unnecessarily devastating our industry, the government operates a fleet of expensive non-commercial dredges which, when operated full time, consume an inordinate share of the smaller overall market. This is particularly true in the seagoing hopper dredge segment where the government spends almost $50 million to operate just four ships. Hopper dredges are highly maneuverable, usually self-propelled ships which accomplish approximately 20 percent of all dredging by volume. It is work that is typically performed at the outermost reach of federal ship channels where sea conditions limit the effectiveness of other types of dredge plant (and where, incidentally, sediment quality is usually not an issue). Until fiscal year 1993, these government hopper dredges consumed approximately 40 percent of the available work with about 20 percent of the Nation's hopper dredge capacity. The other 80 percent of capacity in the private sector, our membership, must compete for the remaining volume. Due largely to this imbalance, the largest hopper dredge in the U.S.-flag fleet left the country for the Far East in 1991. It will return only when market conditions improve substantially. We are working with the public works and appropriations committees to lessen the damage these government dredges do to us and would greatly appreciate the your help in this regard. It is an area ripe for saving scarce taxpayer dollars.

As we have already heard today, we need a better process for disposal site selection. Each federal and state regulatory agency is responsible for the protection of a single receiving media or resource. It is difficult to make the best overall environmental decision when one agency wants to keep soil out of certain waters -- be they ocean or nearshore internal coastal waters -- and another agency works to keep it off scarce uplands near ship channels. There is no agreed upon risk-based decision-making strategy. To help solve this problem, DCA strongly supports policy changes which would encourage the construction of confined disposal facilities. By definition, however, these facilities require the filling of bay or river bottom. Under current law, only the state can provide the leadership to make that happen.

In order to start attempting to improve the regulatory morass, a new statutory authority to deal with this unique transportation problem is an idea that should be explored by Congress. Currently, the Ocean Dumping Act and the Clean Water Act's Section 404 require different standards to be met. The agencies have the authority to make these regulations more uniform, but have made few measurable improvements over the years. Furthermore, the regulatory personnel administering Section 404 are trained primarily to regulate wetlands. These personnel are usually not expert in the various dredged material disposal issues.

Finally, the use of dredged material for beneficial purposes should be employed whenever possible. The Corps of Engineers has done an admirable job in utilizing the soil beneficially when the cost is the same and/or slightly greater than the traditional disposal methodology. There is great potential to accomplish more habitat restoration and beach nourishment if the funds were available.

Thank you for considering our views. I would be happy to answer any questions that you may have.

July 27, 1994

The Honorable William O. Lipinski
Chairman, Subcommittee on Merchant
 Marine
U.S. House of Representatives
Longworth House Office Building
Room 1334
Washington, D.C. 20515-6230

Dear Congressman Lipinski:

I would like to thank you for your June 20 letter and follow-up to the dredging hearings from earlier that same month. You attached three questions as a follow-up to that hearing, to which I would like to respond to at this time.

1. Should comprehensive, long-term planning management programs be a required or voluntary element in a "National Dredging Policy"?

   The answer to this question is an unqualified yes. However, the planning management programs are a very difficult task which requires multi-agency coordination and cooperation. The planning management process itself needs to be clearly defined in order to overcome some of the otherwise bureaucratic shortcomings of the process. Using the Toledo effort as an example, there are ten (10) different local, state, and federal agencies working together to establish a long-term dredge management strategy for the Toledo Harbor Channel. In many cases, these agencies do not enjoy the authority to address the issues confronting this study group. The Soil Conservation Service, for example, has determined that up to 15% of the sediment deposited in the channel could be eliminated if more aggressive and modified tillage programs were implemented in the Maumee River watershed. Unfortunately, due to the federal definition of highly erosive areas, the Soil Conservation Service is not necessarily authorized to implement these programs in the Maumee River watershed. Consequently, when a final recommended management plan is submitted, policy changes at the various levels of government will undoubtedly be required. As a result, any planning management program should proceed with establishing a management plan based not on existing policy or authority, but on best management practices. Policy issues can then be debated when the overriding benefits are clearly understood and presented to policy makers.

TOLEDO-LUCAS COUNTY PORT AUTHORITY One Maritime Plaza • Toledo, Ohio 43604-1866 U.S.A • (419) 243-8251 • FAX (419) 243-1835

2. **Is it true that some Confined Disposal Facilities in the Great Lakes are leaking contamination, and what measures do local authorities plan to take to address this problem?**

As you are well aware, confined disposal facilities are generally under the jurisdiction of the U.S. Army Corps of Engineers. In more recent years, confined disposal facilities were built with a local sponsor who takes over the management and control of the facility upon the completion of the filling operation by the Corps of Engineers. Local sponsors, i.e. port authorities, have extensive experience in managing facilities, and in some cases, plan to develop closed confined disposal facilites for future port development. Port Authority have extensive experience in maintaining and developing property, and I find little concern in addressing the future confined disposal facilities.

However, the issue of leaking confined disposal facilities needs extensive clarification. Confined disposal facilities on the Great Lakes were designed to allow water to pass through them. This would allow the disposal facilities to de-water. Throughout the 1980's, several federal agencies worked together to study the likelihood of contamination leaks from confined disposal facilities. Based on discussions with the Corps of Engineers and U.S. EPA, there was no evidence of contamination leaks from confined disposal facilities.

Unfortunately, too much attention has been devoted to an unwarranted concern over leaking confined disposal facilities, instead of the environmental benefits brought about by using confined disposal facilities as an effective means of disposing of dredge material. When considering the options available with regard to dredged material disposal, confined disposal facilities are the most effective and environmentally beneficial option available. The alternative to confined disposal facilities is to put the material in the open lake, in very expensive upland disposal facilities, or to leave the sediment in place and continue to allow contaminants to be available within the aquatic habitat. When compared to a confined disposal facility, none of the three options are acceptable.

3. Do you believe there is a need for long-term sediment management programs, and do you support Congressman James L Oberstar's (D-MN) proposal to provide for long-term sediment management in the Great Lakes?

   As stated in Question #1, I do support the need for long-term sediment management programs, and do endorse Congressman Oberstar's approach to this effort. In recent weeks, I have worked closely with congressional staff regarding this issue, and some minor modifications and clarifications are in the works. Congressman Oberstar's proposal provides the opportunity to move forward with good, comprehensive management of dredged material, which will not only deal with material after it becomes a problem, but tries to prevent it from clogging our harbors and costing taxpayers additional funds in terms of disposal and the construction of confined disposal facilities.

Should you have any questions or require further information, please feel free to contact me.

Sincerely,

TOLEDO-LUCAS COUNTY PORT AUTHORITY

John Loftus

John M. Loftus
Seaport Director

JML:cmy
dredge.lip

QUESTIONS AND ANSWERS FOR THE RECORD
DR. MORGAN R. REES
DEPUTY ASSISTANT SECRETARY PLANNING POLICY AND LEGISLATION
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

Question: (1) Without legislative action, do you see an indication within the Corps that the Federal Government will cover all disposal costs associated with maintenance dredging for Federal Channels?

Response: The Federal and non-Federal responsibilities for the disposal costs associated with maintenance dredging for Federal channels are defined in law by the individual project authorizations. Federal and non-Federal responsibilities for dredged material disposal vary from project to project depending on the project authorization. The Corps has no authority to assume all disposal costs associated with maintenance dredging for Federal channels, unless specifically directed in the authorizing legislation. Policy resulting from the Water Resources Development Act of 1986 (WRDA 86) assigns the non-Federal project sponsor the responsibility to provide disposal areas for maintenance dredging including any required dikes or containment facilities. Since WRDA 86, navigation projects have been authorized with these requirements. Legislative action would be required to change the division of Federal and non-Federal responsibilities for the disposal costs associated with maintenance of existing authorized projects.

Question: (2) It seems ironic that we cannot dredge our ports when there are still superfund and other abandoned industrial sites which continue to leak pollution into our water. What steps are being taken to address the actual cause of much of the contamination in our harbors?

Response: The contaminants that pollute our nation's harbors and waterways originate from a variety of sources of point and non-point sources such as industrial sites, urban runoff, municipal discharges, agricultural runoff and the atmosphere. (Navigation activities are seldom the source of contaminants.) Until these pollutants are controlled and in-place contaminated sediments removed, there will continue to be pollution issues associated with dredging the nation's harbors and waterways. The responsibility for the control of contaminants in the water rests with the Environmental Protection Agency (EPA) and the various states under the authority of the Clean Water Act. The EPA is currently developing a Contaminated Sediment Management Strategy under the authority of Title V of the Water Resources Development Act of 1992. In our view, much more needs to be done by those agencies responsible for pollution control.

Question: (3) Due to inadequate channel and berthing depths, many tankers must engage in offshore "lightering" to lighten their cargo load. What environmental and safety risks are involved in this process, and how would the environmental costs of a spill compare to the costs associated with the majority of dredging projects?

Response: Tankship lightering operations are common activities and have not been linked to many medium or large pollution incidents. The lightering process slightly increases the likelihood of a spill during transfer operations since it adds an additional transfer to the overall shipment process. The lightering operations are an increased cost to the shipper and ultimately to the consumer. We do not have calculations of the costs of lightering including the environmental cost of spills.

Question: (4) What steps are being taken by the Corps and other agencies to simplify the evaluation and testing procedures for assessing harbor sediments?

Response: On July 21, 1994, the Corps and the EPA released for public review and comment, a draft technical manual for determining the acceptability of dredged material for disposal in inland and near-coastal waters. The Inland Testing Manual (ITM) was drafted by 20 Corps and EPA scientists and has been extensively reviewed by Corps and EPA field offices. The ITM, once formally adopted, will provide national consistency to the process for evaluating the suitability of dredged material disposal options. This will provide predictability to the regulated public and improve the efficiency of dredged material testing. The ITM is based to a great extent on a 1991 technical manual used for the disposal of dredged material in the oceans. The Corps and the EPA will conduct eight public information meetings around the country to inform the regulated public (e.g., the ports) and the environmental community of the proposed manual. A final ITM will be published approximately six months after review and consideration of the comments received.

Carl Sobremisana
Outreach Coordinator
Maritime Administration
U.S. Dept. of Administration
400-7th Street SW, Room 7201
Washington, D.C. 20590

June 8, 1994

Dear Mr. Sobriemisana,

As a representative of marine industry in South Florida and a recent participant in your New Orleans workshop on dredging options, I enclose the Background and Options Questionnaire, along with comments regarding specific options (below). My comments also include a proposal: **that the dredging of the Miami River be considered as a demonstration model for the shallow draft ports of the nation, and as such, that it be adopted for special focus by the federal working group. The uniqueness AND universality of circumstances surrounding the proposed dredging of the Miami River encompass the entire range of problems and possible resolutions of shallow draft ports and rivers that need to be considered by the Dredging Work Group.**

COMMENTARY

Of particular importance, I would like to bring to the working group's awareness the fact that most of the workshop discussion -- including the development of a national dredging policy -- focussed on deep water ports. I would like to point to the Miami River as an example of a shallow draft port that is a tremendous economic contributor to South Florida (see enclosed Beacon Council report, 1991), and yet is plagued by all of the dredging problems associated with the deep water ports discussed at the workshop meeting.

Additionally, the influence of the Miami River and the consequence of whether or not it is dredged has national and international economic and political significance. The Miami River serves as the primary locus for trade generating from the Caribbean Basin Initiative (CBI) and offers strong potential growth with Mexico and the Yucatan through NAFTA.

Because of its access to Central and South America as well as the Caribbean, the Miami River offers economic significance to the state of Florida (number 1 trading partner for 24 CBI countries) and the nation (110,000 trade related jobs as of 1993). Significantly, the Miami area represents 90% of Florida's trade with the CBI region, and nationally. CBI figures totaled $18 billion by April of 1993. Finally, eventual loosening of embargo restrictions in Haiti or Cuba (when Aristide is restored or Castro falls) is sure to be reflected with enormous increases in vessel traffic for the Miami River.

Because the Miami River has not been dredged in 60 years, we have no existing sediment dumping site determined by historical precedent; in a sense, this leaves maintenance caretakers of the

Miami River with no place to go. The existence of South Florida's water table less than a foot below ground, the density of upland topography due to commercial and residential development, close proximity to unique and fragile ecosystems on land and in the water, the nearly full status of the River's closest available landfill, the condition of the Miami River sediments themselves (contaminated with heavy metals), EPA prohibition of ocean dumping, and the tremendous cost of transporting dredged sediments, all conspire to make disposing of dredged sediments from the Miami River a virtual impossibility.

Without disposal options, there can be no dredging. Without dredging, the cargo shipping industry cannot remain competitive or healthy. The loss of a healthy shipping industry on the Miami River means the loss of tax based revenue, jobs, and productivity.

An urgent need for resolution to this problem is apparent. The Army Corps of Engineers reports that sediments in the Miami River are narrowing the navigable channel by as much a foot per year. In places where the river is only 90 feet wide and vessels as wide as 50 feet routinely traverse the river, the loss of even one foot creates critical congestion. Clearly, the narrowing of the channel means significant economic losses for South Florida and serious safety consequences for cargo shippers.

The Army Corp of Engineer's commitment to dredge the Miami River in 1995 covers only the cost of the actual dredging at $12 million; the upland disposal option suggested by the Corp will cost the local sponsor an estimated $100 million -- clearly not a viable alternative for any existing local sponsor. Harbor maintenance fees notwithstanding, further taxing of river interests as a special district will only drive cargo traffic away. Without resolution to the dredging problem, 400 Miami based cargo shipping jobs are threatened, along with 8000 Florida based industry related jobs, the loss of trade markets to 62 international Ports of Call, and close to $2 billion in cargo proceeds annually from Florida's fifth largest port.

Federal response to concern about the Miami River has amounted to the suggestion that local interests "get creative" in finding a resolution to the dredging problem. After years of participation in community and quasi government groups attempting to do just that, the Miami River Marine Group of cargo carriers and terminal operators affected by this impasse are suggesting that the federal government use the Miami River to demonstrate how these problems can be resolved. With the Miami River locale, the federal working group has the opportunity to demonstrate its own creative ability at problem resolution for interested local, state, national, and international communities dependent on the working aspects of the Miami River.

Submitted by Fran Bohnsack, Ph.D.
Executive Director, Miami River Marine Group

OPEN CHANNELS TO TRADE

A Proposal for a National Dredging Policy

SUMMARY OF AAPA NATIONAL DREDGING POLICY

1. *FEDERAL LEADERSHIP*

   The Administration must develop a coordinated Federal strategy that recognizes the benefits to the nation of navigation and dredging.

2. *PERMITTING*

   A streamlined federal permit policy should be put into place that eliminates redundant, sequential reviews, sets out clear lines of responsibility and establishes time lines for issuing permits.

3. *CLEAN WATER ACT (CWA)*

   The CWA should be amended to establish a new section for permitting dredged material in connection with navigation projects, separate from the "Section 404 Wetland Permitting."

4. *DREDGED MATERIAL DISPOSAL AREAS*

   The Corps of Engineers should develop a long-term implementable plan to identify and develop disposal sites that will handle contaminated dredged material in connection with construction of authorized, federally-funded navigation projects.

5. *BENEFICIAL USE*

   The Federal Government should amend its regulations to encourage and fund beneficial use of dredged material. This would include the establishment of Regional Mitigation Banks.

6. *CONTAMINATED SEDIMENTS*

   There should be a concentrated effort by the Federal Government on the clean-up and prevention of contaminated sources normally associated with upstream industrial and non-point source runoff.

7. *PERSONNEL*

   Policy should be established to recruit and retain personnel with the expertise to manage and carry out dredging and permitting.

(March 1994)

AMERICAN ASSOCIATION OF PORT AUTHORITIES
1010 Duke Street, Alexandria, VA 22314 • (703) 684-5700 • FAX (703) 684-6321

OPEN CHANNELS TO TRADE

A Proposal for a National Dredging Policy

LEGISLATIVE PROPOSALS TO IMPLEMENT A NATIONAL DREDGING POLICY

The maritime, port, labor, business and labor communities have called for the adoption of a National Dredging Policy to facilitate the timely and cost-effective dredging of our nation's navigation channels. These waterways are our international highways to the global marketplace. The development and maintenance of these navigation channels is essential if we are going to remain competitive and take full advantage of expanding international trading opportunities. The dredging of our nation's navigation channels to keep them open for trade, however, is too often frustrated by inconsistent, complex and duplicative laws and regulations. In order to overcome these problems and to provide a more coherent and consistent program for dredging and managing sediments, inconsistencies between the Clean Water (CWA) and Ocean Dumping Acts (ODA) need to be reconciled and outdated provisions in the 1986 Water Resources Development Act (WRDA) that favor open water disposal over confined and upland disposal options need to be revised to establish federal responsibility for long-term disposal planning and the construction of dredged material disposal sites.

In order to provide for implementation of the National Dredging Policy objectives the following legislative changes should be implemented:

(1) *Establish a new section 406 of the Clean Water Act, separate from the 404 wetlands provisions and consistent with the ODA, for permitting of the discharge of dredged material from navigational dredging to EPA approved disposal areas;*

(2) *Amend other provisions of the CWA to emphasize the prevention of pollution that may contaminate sediment and require consideration of the use and value of the waters and channels to navigation in establishing appropriate criteria and standards; and*

(3) *Establish a comprehensive program under WRDA, establishing federal responsibility, for siting, construction and funding of confined and land-based disposal facilities for dredged material, in connection with construction of authorized federal navigation projects, that does not meet criteria for open water disposal.*

Summaries of specific proposed amendments are attached.

March, 1994

OPEN CHANNELS TO TRADE

A Proposal for a National Dredging Policy

(1) SUMMARY OF CLEAN WATER ACT (CWA) LEGISLATIVE PROPOSAL FOR A NEW SECTION 406 FOR DREDGED MATERIAL DISPOSAL

Propose a new CWA Section 406, "Disposal of Dredged Material from Navigational Dredging" to create a single streamlined program from what are now two separate programs covering open water disposal -- Section 404, Clean Water Act; and Section 103, Marine Protection, Research & Sanctuaries Act (MPRSA).

Section 406 would establish specific timelines for completing components of the permit review process.

Section 406 would NOT affect the need for: Section 404 permit to discharge dredged or fill material into wetlands or other "special aquatic sites;" or Existing requirements for designation and specification of dredged material disposal sites or areas.

Only material dredged in connection with ports, waterways, and inland harbor projects permitted under Section 10 of the Rivers and Harbors Act or subject to separate Congressional authorization would be eligible for a Section 406 permit.

The EPA Administrator would continue to promulgate the substantive regulations for open water disposal, but wold be required to merge and reconcile existing procedures into one body of regulations. It is expected the resulting "composite" criteria may reflect generally the more exacting requirements of the MPRSA.

Under the proposal, all practicable disposal and management options would be considered for environmental acceptability, technological feasibility and economic practicability. Credit would also be given for the beneficial impacts of the project.

EPA's regulations would classify dredged material into three categories:

- Presumptively clean material that is excluded from testing under current MPRSA or CWA regulations (could receive a nationwide permit or permit by rule).
- Material upon actual testing or through application of special management practices is determined not to threaten environmental degradation in the vicinity of the disposal site. A general or individual permit could be issued.
- Material that, even with the application of appropriate management practices, could not be rendered compatible with existing environmental conditions in the disposal site area.

Formal permitting authority would be retained as a Federal responsibility. The Secretary of the Army, acting through the Corps of Engineers, would be responsible for the final decision to issue of deny the permit. An explicit processing timetable would be established.

March, 1994

(2) SUMMARIES OF PROPOSED ADDITIONAL AMENDMENTS CLEAN WATER ACT LEGISLATIVE PROPOSALS

Numerous additional amendments are proposed to the Clean Water Act to assure that in seeking to protect water quality on a watershed basis, downstream sediment contamination and navigation interests are considered. The proposals are also designed to assure that discharge controls and watershed plans consider commercial navigation among the water uses and values to be protected against impairment, and, that efforts are made to identify and control upstream point and nonpoint discharge sources which may degrade downstream sediments, and thereby impair or impeded the ability to keep downstream harbors and channels open for navigation.

The proposals also seek to ensure that sediment quality standards are scientifically based and are not used as rigid pass/fail criteria in connection with dredged material management.

Specifically, the amendments would:

- Promote watershed management that ensures that water and sediment quality meet commercial navigation, as well as environmental needs.
- Ensure that sediment quality criteria or standards are field tested and not inappropriately used as rigid pass/fail criteria, and when used, are in accordance with EPA technical implementation guidance issued simultaneously with proposal of the criteria.
- Direct that monitoring and remediation efforts geared to contaminated sediments give highest priority to "hot spots" of high level, concentrated contamination, rather than to broad areas of diffuse contamination--to assure that limited resources are directed at where they will do the most good and can be the most cost-effective.
- Watershed planning and management should take into consideration commercial navigation interests in minimizing upstream point and nonpoint source contributions to downstream contamination, which may impede existing, designated, and potential use and values of waters used for commercial navigation, or which may impede the removal and environmentally sound disposal or beneficial use of dredged sediments.
- Projects for the removal, disposal, and remediation of contaminated bottom sediments in harbors and navigation channels, which are included in watershed management plans, should be included in any State needs assessments and in the

infrastructure needs inventory, and be eligible for State Revolving Fund loans.

- State anti-degradation policies and water quality standards should take into account a waterway's use and value for navigation; accordingly, dredging of sediments and their subsequent disposal (in areas with sediments of similar background composition) should not be considered degradation of existing water quality, because these activities represent the relocation of contaminants introduced by upstream direct and nonpoint sources. Emphasis should be placed on curing the degradation and use impairments (navigational and environmental) associated with the responsible sources of pollution.

- Section 115 should be amended to require the Corps of Engineers to construct environmentally sound Confined Disposal Facilities (CDF's) for, in addition to its responsibility for the removal and disposal of, contaminated sediments.

- State certifications under Section 401 should consider impacts on a waterway's "use and value for navigation"; particularly downstream impacts of the discharge on sediment quality that may impair commercial navigation by impeding the ability to dredge and disposal of sediment.

- In identifying impaired waters associated with uncontrolled nonpoint source pollution under Section 319, consideration should be given to attainment and maintenance of water and sediment quality that supports the use and value of water for navigation (as well as environmental uses) -- including not only in the immediate vicinity of nonpoint source discharges, but also in downstream navigable channel and harbor areas whose use and value for commercial navigation is impaired by the nonpoint discharges.

- Effluent guidelines should specifically limit wastewater derived impacts on nearby and downstream sediments, as well as ground water.

- The criteria under Section 105 for selecting demonstration projects to demonstrate new or significant improved practices, methods, technologies, or processes should include the potential to control effectively or treat discharge sources that may impair sediment as well as water quality.

- Facility construction costs needed to accomplish sediment quality goals should be included in any water quality infrastructure needs assessment.

March, 1994

OPEN CHANNELS TO TRADE

A Proposal for a National Dredging Policy

(3) PROPOSED WATER RESOURCE DEVELOPMENT ACT (WRDA) AMENDMENTS

A series of inter-related proposals would establish a comprehensive program to facilitate the siting and construction of environmentally-sound land-based dredged material disposal sites and confined disposal facilities (CDF). Wetlands subject to Section 404 permitting are excluded. Such a program is needed because of the shortfall in capacity for confined and land-based disposal of such material. This results in significant delays and cost increases in commercial navigation projects, which has an adverse effect on waterborne commerce and international competitiveness.

Non-Federal interests (local sponsors of Federal navigation projects) would be subject to the general cost-sharing principles of WRDA 86, not only for the dredging project but for the disposal of the resulting dredged material.

Any CDF or upland disposal sites that had to be constructed to accommodate dredged material associated with authorized harbor and channel dredging would be considered part of the general navigation features of the project and therefore, be subject to the same cost-sharing requirements as any other part of the project. This would be a change form current law and remove an existing strong economic incentive to utilize open water disposal sites wherever possible, even where this may not be the most environmentally preferred option.

This approach would reduce the disparity of treatment between open water disposal sites -- which there is shared cost to the non-Federal interests, and upland sites -- for which there is total cost to the non-Federal government.

To address the problem of contaminated sediments, present law would be clarified definitively to authorize the Secretary to dispose - as well as remove - contaminated sediments from navigation channels where the objective is environmental enhancement ("environmental dredging"), rather than the promotion of commercial navigation ("navigational dredging").

To streamline the timing and mechanics of CDF siting and construction, the Corps in consultation with EPA, would be directed to establish criteria for siting, constructing, operating, and maintaining land-based dredged material disposal sites and confined disposal facilities.

The CDF criteria would recognize that dredged material associated with new-work dredging consists largely of subsurface "virgin" material that has never come into contact with pollutants. They would also reflect the fact that maintenance dredged material, if it has been adequately characterized initially, will not differ significantly in composition and environmental hazard potential form one dredging cycle to the next, unless there has been a major change in circumstances (e.g., a large spill in the area or the addition of new upstream pollution sources.)

March, 1994

BOSTON PUBLIC LIBRARY
3 9999 05982 703 8

ISBN 0-16-044827-1

90000

9 780160 448270